



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52631	Chain O'Lakes SP	8/29/2022	8/31/2022	< 0.30
AB52632	Kunkel Lake @ Oubache SP	8/29/2022	8/31/2022	< 0.30
AB52633	Potato Creek State Park	8/30/2022	8/31/2022	< 0.30
AB52634	Mississinewa Lake Miami SRA	8/30/2022	8/31/2022	0.63
AB52635	Lost Bridge West SRA	8/30/2022	8/31/2022	< 0.30
AB52636	Mississinewa Lake Miami SRA (Field Dup)	8/30/2022	8/31/2022	0.53
AB52637	Field Blank	8/30/2022	8/31/2022	< 0.30
AB52638	Patoka SRA Beach	8/29/2022	8/31/2022	< 0.30
AB52642	Ft. Ben Harrison SP Dog Lake	8/30/2022	8/31/2022	< 0.30
AB52643	Lincoln State Park	8/29/2022	8/31/2022	< 0.30

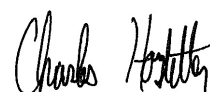
Test Information

Request: 8/31/2022 2:57:02 PM
Date: 8/31/2022 - 9/1/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.406 Abs	0.017 µg/L	R ² =0.99156, 99.2%			M22G208:
MCT Std 0	MICROCYSTINS ADDA 54	1.426 Abs [1.4160] {1.0 C	0.001 µg/L [0.009]	R ² =0.99156, 100.7%			M22G208:
MCT Std 1	MICROCYSTINS ADDA 54	1.289 Abs	0.079 µg/L	R ² =0.99156, 91.0%			M22G208:
MCT Std 1	MICROCYSTINS ADDA 54	1.084 Abs [1.1865] {12.2	0.189 µg/L [0.134]	R ² =0.99156, 76.5%			M22G208:
MCT Std 2	MICROCYSTINS ADDA 54	0.781 Abs	0.452 µg/L	R ² =0.99156, 55.1%			M22G208:
MCT Std 2	MICROCYSTINS ADDA 54	0.762 Abs [0.7715] {1.7 C	0.477 µg/L [0.465]	R ² =0.99156, 53.8%			M22G208:
MCT Std 3	MICROCYSTINS ADDA 54	0.546 Abs	0.994 µg/L	R ² =0.99156, 38.5%			M22G208:
MCT Std 3	MICROCYSTINS ADDA 54	0.602 Abs [0.5740] {6.9 C	0.796 µg/L [0.895]	R ² =0.99156, 42.5%			M22G208:
MCT Std 4	MICROCYSTINS ADDA 54	0.486 Abs	1.331 µg/L	R ² =0.99156, 34.3%			M22G208:
MCT Std 4	MICROCYSTINS ADDA 54	0.438 Abs [0.4620] {7.3 C	1.811 µg/L [1.571]	R ² =0.99156, 30.9%			M22G208:
MCT Std 5	MICROCYSTINS ADDA 54	0.324 Abs	> 5.000 µg/L	22.881 %Abs			M22G208:
MCT Std 5	MICROCYSTINS ADDA 54	0.316 Abs [0.3200] {1.8 C	> 5.000 µg/L	22.316 %Abs			M22G208:
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.176 Abs	0.137 µg/L	83.051 %Abs			M22G208:
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.252 Abs [1.2140] {4.4 C	0.097 µg/L [0.117]	88.418 %Abs [85.7			M22G208:
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.835 Abs	0.388 µg/L	58.969 %Abs			M22G208:
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.868 Abs [0.8515] {2.7 C	0.355 µg/L [0.372]	61.299 %Abs [60.1			M22G208:
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.818 Abs	0.407 µg/L	57.768 %Abs			M22G208:
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.557 Abs [0.6875] {26.8	0.949 µg/L [0.678]	39.336 %Abs [48.5			M22G208:

Note

Signature



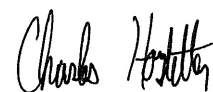
Test Information

Request: 8/31/2022 3:06:47 PM
Date: 8/31/2022 - 9/1/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
QCS 546	MICROCYSTINS ADDA 54	0.671 Abs	0.629 µg/L	47.387 %Abs		0.300 - 5.000	M22G208:
QCS 546	MICROCYSTINS ADDA 54	0.654 Abs [0.6625] {1.8 C	0.665 µg/L [0.647]	46.186 %Abs [46.7		0.300 - 5.000	M22G208:
AB52631	MICROCYSTINS ADDA 54	1.077 Abs	0.194 µg/L	Low, 76.059 %Abs		0.300 - 5.000	M22G208:
AB52631	MICROCYSTINS ADDA 54	1.076 Abs [1.0765] {0.1 C	0.194 µg/L [0.194]			0.300 - 5.000	M22G208:
AB52631MS	MICROCYSTINS ADDA 54	0.607 Abs	0.782 µg/L	42.867 %Abs		0.300 - 5.000	M22G208:
AB52631MS	MICROCYSTINS ADDA 54	0.667 Abs [0.6370] {6.7 C	0.637 µg/L [0.710]	47.105 %Abs [44.9		0.300 - 5.000	M22G208:
AB52631MSD	MICROCYSTINS ADDA 54	0.720 Abs	0.540 µg/L	50.847 %Abs		0.300 - 5.000	M22G208:
AB52631MSD	MICROCYSTINS ADDA 54	0.685 Abs [0.7025] {3.5 C	0.602 µg/L [0.571]	48.376 %Abs [49.6		0.300 - 5.000	M22G208:
AB52632	MICROCYSTINS ADDA 54	1.243 Abs	0.102 µg/L	Low, 87.782 %Abs		0.300 - 5.000	M22G208:
AB52632	MICROCYSTINS ADDA 54	1.196 Abs [1.2195] {2.7 C	0.126 µg/L [0.114]			0.300 - 5.000	M22G208:
AB52633	MICROCYSTINS ADDA 54	1.175 Abs	0.137 µg/L	Low, 82.980 %Abs		0.300 - 5.000	M22G208:
AB52633	MICROCYSTINS ADDA 54	1.109 Abs [1.1420] {4.1 C	0.174 µg/L [0.155]			0.300 - 5.000	M22G208:
AB52634	MICROCYSTINS ADDA 54	0.767 Abs	0.471 µg/L	54.167 %Abs		0.300 - 5.000	M22G208:
AB52634	MICROCYSTINS ADDA 54	0.605 Abs [0.6860] {16.7	0.788 µg/L [0.629]	42.726 %Abs [48.4		0.300 - 5.000	M22G208:
AB52635	MICROCYSTINS ADDA 54	0.982 Abs	0.258 µg/L	Low, 69.350 %Abs		0.300 - 5.000	M22G208:
AB52635	MICROCYSTINS ADDA 54	1.021 Abs [1.0015] {2.8 C	0.230 µg/L [0.244]			0.300 - 5.000	M22G208:
AB52636	MICROCYSTINS ADDA 54	0.746 Abs	0.500 µg/L	52.684 %Abs		0.300 - 5.000	M22G208:
AB52636	MICROCYSTINS ADDA 54	0.712 Abs [0.7290] {3.3 C	0.553 µg/L [0.526]	50.282 %Abs [51.4		0.300 - 5.000	M22G208:
AB52637	MICROCYSTINS ADDA 54	1.222 Abs	0.113 µg/L	Low, 86.299 %Abs		0.300 - 5.000	M22G208:
AB52637	MICROCYSTINS ADDA 54	1.278 Abs [1.2500] {3.2 C	0.084 µg/L [0.098]			0.300 - 5.000	M22G208:
AB52638	MICROCYSTINS ADDA 54	1.262 Abs	0.092 µg/L	Low, 89.124 %Abs		0.300 - 5.000	M22G208:
AB52638	MICROCYSTINS ADDA 54	1.226 Abs [1.2440] {2.0 C	0.111 µg/L [0.102]			0.300 - 5.000	M22G208:
AB52642	MICROCYSTINS ADDA 54	1.411 Abs	0.014 µg/L	Low, 99.647 %Abs		0.300 - 5.000	M22G208:
AB52642	MICROCYSTINS ADDA 54	1.447 Abs [1.4290] {1.8 C	0.000 µg/L [0.007]			0.300 - 5.000	M22G208:
AB52643	MICROCYSTINS ADDA 54	1.308 Abs	0.069 µg/L	Low, 92.373 %Abs		0.300 - 5.000	M22G208:
AB52643	MICROCYSTINS ADDA 54	1.123 Abs [1.2155] {10.8	0.166 µg/L [0.117]			0.300 - 5.000	M22G208:
LFB 2	MICROCYSTINS ADDA 54	0.762 Abs	0.477 µg/L	53.814 %Abs		0.300 - 5.000	M22G208:
LFB 2	MICROCYSTINS ADDA 54	0.741 Abs [0.7515] {2.0 C	0.508 µg/L [0.493]	52.331 %Abs [53.0		0.300 - 5.000	M22G208:
LRB 2	MICROCYSTINS ADDA 54	1.261 Abs	0.093 µg/L	Low, 89.054 %Abs		0.300 - 5.000	M22G208:
LRB 2	MICROCYSTINS ADDA 54	1.298 Abs [1.2795] {2.0 C	0.074 µg/L [0.083]			0.300 - 5.000	M22G208:

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:

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: M22G2082

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
8/31/2022 2:57:02 PM					
MCT Std 0	1.406 Abs	0.017 µg/L	R ² =0.99156, 99.294 %Abs	RK1:23->A01@2	
MCT Std 0	1.426 Abs [1.4160] {1.0 CV}	0.001 µg/L [0.009] {125.7 CV}	R ² =0.99156, 100.706 %Abs	RK1:23->B01@2	
MCT Std 1	1.289 Abs	0.079 µg/L	R ² =0.99156, 91.031 %Abs	RK1:24->C01@2	
MCT Std 1	1.084 Abs [1.1865] {12.2 CV}	0.189 µg/L [0.134] {58.0 CV}	R ² =0.99156, 76.554 %Abs	RK1:24->D01@2	
MCT Std 2	0.781 Abs	0.452 µg/L	R ² =0.99156, 55.155 %Abs	RK1:25->E01@2	
MCT Std 2	0.762 Abs [0.7715] {1.7 CV}	0.477 µg/L [0.465] {3.8 CV}	R ² =0.99156, 53.814 %Abs	RK1:25->F01@3	
MCT Std 3	0.546 Abs	0.994 µg/L	R ² =0.99156, 38.559 %Abs	RK1:26->G01@3	
MCT Std 3	0.602 Abs [0.5740] {6.9 CV}	0.796 µg/L [0.895] {15.6 CV}	R ² =0.99156, 42.514 %Abs	RK1:26->H01@3	
MCT Std 4	0.486 Abs	1.331 µg/L	R ² =0.99156, 34.322 %Abs	RK1:27->A02@2	
MCT Std 4	0.438 Abs [0.4620] {7.3 CV}	1.811 µg/L [1.571] {21.6 CV}	R ² =0.99156, 30.932 %Abs	RK1:27->B02@2	
MCT Std 5	0.324 Abs	> 5.000 µg/L	22.881 %Abs	RK1:28->C02@2	
MCT Std 5	0.316 Abs [0.3200] {1.8 CV}	> 5.000 µg/L	22.316 %Abs	RK1:28->D02@2	

8/31/2022 2:57:02 PM					
MCT 546 LRB 1	1.176 Abs	0.137 µg/L	83.051 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.252 Abs [1.2140] {4.4 CV}	0.097 µg/L [0.117] {24.2 CV}	88.418 %Abs [85.734 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.835 Abs	0.388 µg/L	58.969 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.868 Abs [0.8515] {2.7 CV}	0.355 µg/L [0.372] {6.3 CV}	61.299 %Abs [60.134 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.818 Abs	0.407 µg/L	57.768 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.557 Abs [0.6875] {26.8 CV}	0.949 µg/L [0.678] {56.5 CV}	39.336 %Abs [48.552 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.4160	0.0090			
MCT Std 0 [SD]	0.0141	0.0113			
MCT Std 0 [%CV]	0.9987	125.7079			
MCT Std 1 [MEAN]	1.1865	0.1340			
MCT Std 1 [SD]	0.1450	0.0778			
MCT Std 1 [%CV]	12.2172	58.0461			
MCT Std 1 [%DIFF]		-10.6667			
MCT Std 2 [MEAN]	0.7715	0.4645			
MCT Std 2 [SD]	0.0134	0.0177			
MCT Std 2 [%CV]	1.7414	3.8057			
MCT Std 2 [%DIFF]		16.1250			
MCT Std 3 [MEAN]	0.5740	0.8950			
MCT Std 3 [SD]	0.0396	0.1400			
MCT Std 3 [%CV]	6.8986	15.6433			
MCT Std 3 [%DIFF]		-10.5000			
MCT Std 4 [MEAN]	0.4620	1.5710			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0339	0.3394			
MCT Std 4 [%CV]	7.3466	21.6048			
MCT Std 4 [%DIFF]		-21.4500			
MCT Std 5 [MEAN]	0.3200				
MCT Std 5 [SD]	0.0057				
MCT Std 5 [%CV]	1.7678				
MCT 546 LRB 1 [MEAN]	1.2140	0.1170			
MCT 546 LRB 1 [SD]	0.0537	0.0283			
MCT 546 LRB 1 [%CV]	4.4267	24.1746			
MCT 546 Low-CV [MEAN]	0.8515	0.3715			
MCT 546 Low-CV [SD]	0.0233	0.0233			
MCT 546 Low-CV [%CV]	2.7404	6.2812			
MCT 546 LFB 1 [MEAN]	0.6875	0.6780			
MCT 546 LFB 1 [SD]	0.1846	0.3833			
MCT 546 LFB 1 [%CV]	26.8443	56.5268			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4263
 B = 1.3139
 C = 0.34694
 D = 0.32527
 R2 coef = 0.99156
 50% = 0.560

