



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB51536	Summit Lake - State Park	6/21/2022	6/22/2022	< 0.30
AB51537	Kunkel Beach @ Oubache State Park	6/20/2022	6/22/2022	< 0.30
AB51538	Pokagon State Park	6/20/2022	6/22/2022	< 0.30
AB51539	Potawatomi Inn's Beach	6/20/2022	6/22/2022	< 0.30
AB51540	Chain O'Lakes SP	6/20/2022	6/22/2022	< 0.30
AB51541	Potato Creek State Park	6/21/2022	6/22/2022	< 0.30
AB51542	Lost Bridge West SRA	6/21/2022	6/22/2022	0.85
AB51543	Mississinewa Lake Miami SRA	6/21/2022	6/22/2022	1.11
AB51544	Lost Bridge West SRA (Field Dup)	6/21/2022	6/22/2022	1.10
AB51545	Field Blank	6/20/2022	6/22/2022	< 0.30
AB51546	Lincoln State Park	6/20/2022	6/22/2022	< 0.30
AB51547	Patoka SRA Beach	6/20/2022	6/22/2022	< 0.30
AB51548	Ferdinand State Forest Lake	6/20/2022	6/22/2022	< 0.30

Test Information

Request: 6/22/2022 2:33:38 PM
Date: 6/22/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.312 Abs	0.000 µg/L	R ² =0.99490, 100.7			M22B127(
MCT Std 0	MICROCYSTINS ADDA 54	1.292 Abs [1.3020] {1.1 C	0.013 µg/L [0.007]	R ² =0.99490, 99.23			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.108 Abs	0.121 µg/L	R ² =0.99490, 85.10			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.064 Abs [1.0860] {2.9 C	0.149 µg/L [0.135]	R ² =0.99490, 81.72			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.790 Abs	0.394 µg/L	R ² =0.99490, 60.67			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.722 Abs [0.7560] {6.4 C	0.489 µg/L [0.442]	R ² =0.99490, 55.45			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.511 Abs	1.042 µg/L	R ² =0.99490, 39.24			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.525 Abs [0.5180] {1.9 C	0.982 µg/L [1.012]	R ² =0.99490, 40.32			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.439 Abs	1.472 µg/L	R ² =0.99490, 33.71			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.424 Abs [0.4315] {2.5 C	1.602 µg/L [1.537]	R ² =0.99490, 32.56			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.286 Abs	> 5.000 µg/L	21.966 %Abs			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.263 Abs [0.2745] {5.9 C	> 5.000 µg/L	20.200 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.225 Abs	0.052 µg/L	94.086 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.193 Abs [1.2090] {1.9 C	0.070 µg/L [0.061]	91.628 %Abs [92.8			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.791 Abs	0.393 µg/L	60.753 %Abs			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.776 Abs [0.7835] {1.4 C	0.412 µg/L [0.403]	59.601 %Abs [60.1			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.743 Abs	0.457 µg/L	57.066 %Abs			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.728 Abs [0.7355] {1.4 C	0.480 µg/L [0.468]	55.914 %Abs [56.4			M22B127(

Note

Signature

David Jordan

Date: 6/22/2022

Test Report (by Request)

Test Information

Request: 6/22/2022 2:34:45 PM
Date: 6/22/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB51536	MICROCYSTINS ADDA 54	1.208 Abs	0.062 µg/L	Low, 92.780 %Abs		0.300 - 5.000	M22B127(
AB51536	MICROCYSTINS ADDA 54	1.187 Abs [1.1975] {1.2 C	0.074 µg/L [0.068]	Low, 91.167 %Abs		0.300 - 5.000	M22B127(
AB51537	MICROCYSTINS ADDA 54	1.185 Abs	0.075 µg/L	Low, 91.014 %Abs		0.300 - 5.000	M22B127(
AB51537	MICROCYSTINS ADDA 54	1.116 Abs [1.1505] {4.2 C	0.116 µg/L [0.095]	Low, 85.714 %Abs		0.300 - 5.000	M22B127(
AB51537MS	MICROCYSTINS ADDA 54	0.634 Abs	0.654 µg/L	48.694 %Abs		0.300 - 5.000	M22B127(
AB51537MS	MICROCYSTINS ADDA 54	0.584 Abs [0.6090] {5.8 C	0.781 µg/L [0.717]	44.854 %Abs [46.7		0.300 - 5.000	M22B127(
AB51537MSD	MICROCYSTINS ADDA 54	0.706 Abs	0.515 µg/L	54.224 %Abs		0.300 - 5.000	M22B127(
AB51537MSD	MICROCYSTINS ADDA 54	0.667 Abs [0.6865] {4.0 C	0.585 µg/L [0.550]	51.229 %Abs [52.7		0.300 - 5.000	M22B127(
AB51538	MICROCYSTINS ADDA 54	1.157 Abs	0.091 µg/L	Low, 88.863 %Abs		0.300 - 5.000	M22B127(
AB51538	MICROCYSTINS ADDA 54	1.123 Abs [1.1400] {2.1 C	0.112 µg/L [0.102]	Low, 86.252 %Abs		0.300 - 5.000	M22B127(
AB51539	MICROCYSTINS ADDA 54	1.139 Abs	0.102 µg/L	Low, 87.481 %Abs		0.300 - 5.000	M22B127(
AB51539	MICROCYSTINS ADDA 54	1.133 Abs [1.1360] {0.4 C	0.105 µg/L [0.103]	Low, 87.020 %Abs		0.300 - 5.000	M22B127(
AB51540	MICROCYSTINS ADDA 54	1.116 Abs	0.116 µg/L	Low, 85.714 %Abs		0.300 - 5.000	M22B127(
AB51540	MICROCYSTINS ADDA 54	1.066 Abs [1.0910] {3.2 C	0.148 µg/L [0.132]	Low, 81.874 %Abs		0.300 - 5.000	M22B127(
AB51541	MICROCYSTINS ADDA 54	1.203 Abs	0.065 µg/L	Low, 92.396 %Abs		0.300 - 5.000	M22B127(
AB51541	MICROCYSTINS ADDA 54	1.152 Abs [1.1775] {3.1 C	0.094 µg/L [0.079]	Low, 88.479 %Abs		0.300 - 5.000	M22B127(
AB51542	MICROCYSTINS ADDA 54	0.575 Abs	0.807 µg/L	44.163 %Abs		0.300 - 5.000	M22B127(
AB51542	MICROCYSTINS ADDA 54	0.551 Abs [0.5630] {3.0 C	0.885 µg/L [0.846]	42.320 %Abs [43.2		0.300 - 5.000	M22B127(
AB51543	MICROCYSTINS ADDA 54	0.507 Abs	1.060 µg/L	38.940 %Abs		0.300 - 5.000	M22B127(
AB51543	MICROCYSTINS ADDA 54	0.486 Abs [0.4965] {3.0 C	1.164 µg/L [1.112]	37.327 %Abs [38.1		0.300 - 5.000	M22B127(
AB51544	MICROCYSTINS ADDA 54	0.539 Abs	0.928 µg/L	41.398 %Abs		0.300 - 5.000	M22B127(
AB51544	MICROCYSTINS ADDA 54	0.467 Abs [0.5030] {10.1	1.274 µg/L [1.101]	35.868 %Abs [38.6		0.300 - 5.000	M22B127(
AB51545	MICROCYSTINS ADDA 54	1.281 Abs	0.020 µg/L	Low, 98.387 %Abs		0.300 - 5.000	M22B127(
AB51545	MICROCYSTINS ADDA 54	1.247 Abs [1.2640] {1.9 C	0.040 µg/L [0.030]	Low, 95.776 %Abs		0.300 - 5.000	M22B127(
AB51546	MICROCYSTINS ADDA 54	1.141 Abs	0.101 µg/L	Low, 87.634 %Abs		0.300 - 5.000	M22B127(
AB51546	MICROCYSTINS ADDA 54	1.141 Abs [1.1410] {0.0 C	0.101 µg/L [0.101]	Low, 87.634 %Abs		0.300 - 5.000	M22B127(
AB51547	MICROCYSTINS ADDA 54	1.170 Abs	0.084 µg/L	Low, 89.862 %Abs		0.300 - 5.000	M22B127(
AB51547	MICROCYSTINS ADDA 54	1.097 Abs [1.1335] {4.6 C	0.128 µg/L [0.106]	Low, 84.255 %Abs		0.300 - 5.000	M22B127(
AB51548	MICROCYSTINS ADDA 54	1.148 Abs	0.097 µg/L	Low, 88.172 %Abs		0.300 - 5.000	M22B127(
AB51548	MICROCYSTINS ADDA 54	1.070 Abs [1.1090] {5.0 C	0.145 µg/L [0.121]	Low, 82.181 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.753 Abs	0.443 µg/L	57.834 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.736 Abs [0.7445] {1.6 C	0.468 µg/L [0.456]	56.528 %Abs [57.1		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.188 Abs	0.073 µg/L	Low, 91.244 %Abs		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.210 Abs [1.1990] {1.3 C	0.061 µg/L [0.067]	Low, 92.934 %Abs		0.300 - 5.000	M22B127(

Note

Signature *David Jordan*

Date: 6/22/2022

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: M22B1270

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
6/22/2022 2:33:38 PM					
MCT Std 0	1.312 Abs	0.000 µg/L	R ² =0.99490, 100.768 %Abs	RK1:23->A01@2	
MCT Std 0	1.292 Abs [1.3020] {1.1 CV}	0.013 µg/L [0.007] {141.4 CV}	R ² =0.99490, 99.232 %Abs	RK1:23->B01@2	
MCT Std 1	1.108 Abs	0.121 µg/L	R ² =0.99490, 85.100 %Abs	RK1:24->C01@2	
MCT Std 1	1.064 Abs [1.0860] {2.9 CV}	0.149 µg/L [0.135] {14.7 CV}	R ² =0.99490, 81.720 %Abs	RK1:24->D01@2	
MCT Std 2	0.790 Abs	0.394 µg/L	R ² =0.99490, 60.676 %Abs	RK1:25->E01@2	
MCT Std 2	0.722 Abs [0.7560] {6.4 CV}	0.489 µg/L [0.442] {15.2 CV}	R ² =0.99490, 55.453 %Abs	RK1:25->F01@3	
MCT Std 3	0.511 Abs	1.042 µg/L	R ² =0.99490, 39.247 %Abs	RK1:26->G01@3	
MCT Std 3	0.525 Abs [0.5180] {1.9 CV}	0.982 µg/L [1.012] {4.2 CV}	R ² =0.99490, 40.323 %Abs	RK1:26->H01@3	
MCT Std 4	0.439 Abs	1.472 µg/L	R ² =0.99490, 33.717 %Abs	RK1:27->A02@2	
MCT Std 4	0.424 Abs [0.4315] {2.5 CV}	1.602 µg/L [1.537] {6.0 CV}	R ² =0.99490, 32.565 %Abs	RK1:27->B02@2	
MCT Std 5	0.286 Abs	> 5.000 µg/L	21.966 %Abs	RK1:28->C02@2	
MCT Std 5	0.263 Abs [0.2745] {5.9 CV}	> 5.000 µg/L	20.200 %Abs	RK1:28->D02@2	

6/22/2022 2:33:38 PM					
MCT 546 LRB 1	1.225 Abs	0.052 µg/L	94.086 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.193 Abs [1.2090] {1.9 CV}	0.070 µg/L [0.061] {20.9 CV}	91.628 %Abs [92.857 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.791 Abs	0.393 µg/L	60.753 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.776 Abs [0.7835] {1.4 CV}	0.412 µg/L [0.403] {3.3 CV}	59.601 %Abs [60.177 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.743 Abs	0.457 µg/L	57.066 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.728 Abs [0.7355] {1.4 CV}	0.480 µg/L [0.468] {3.5 CV}	55.914 %Abs [56.490 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.3020	0.0065			
MCT Std 0 [SD]	0.0141	0.0092			
MCT Std 0 [%CV]	1.0862	141.4214			
MCT Std 1 [MEAN]	1.0860	0.1350			
MCT Std 1 [SD]	0.0311	0.0198			
MCT Std 1 [%CV]	2.8649	14.6659			
MCT Std 1 [%DIFF]		-10.0000			
MCT Std 2 [MEAN]	0.7560	0.4415			
MCT Std 2 [SD]	0.0481	0.0672			
MCT Std 2 [%CV]	6.3602	15.2152			
MCT Std 2 [%DIFF]		10.3750			
MCT Std 3 [MEAN]	0.5180	1.0120			
MCT Std 3 [SD]	0.0099	0.0424			
MCT Std 3 [%CV]	1.9111	4.1923			
MCT Std 3 [%DIFF]		1.2000			
MCT Std 4 [MEAN]	0.4315	1.5370			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0106	0.0919		
MCT Std 4 [%CV]	2.4581	5.9807		
MCT Std 4 [%DIFF]		-23.1500		
MCT Std 5 [MEAN]	0.2745			
MCT Std 5 [SD]	0.0163			
MCT Std 5 [%CV]	5.9248			
MCT 546 LRB 1 [MEAN]	1.2090	0.0610		
MCT 546 LRB 1 [SD]	0.0226	0.0127		
MCT 546 LRB 1 [%CV]	1.8716	20.8654		
MCT 546 Low-CV [MEAN]	0.7835	0.4025		
MCT 546 Low-CV [SD]	0.0106	0.0134		
MCT 546 Low-CV [%CV]	1.3537	3.3379		
MCT 546 LFB 1 [MEAN]	0.7355	0.4685		
MCT 546 LFB 1 [SD]	0.0106	0.0163		
MCT 546 LFB 1 [%CV]	1.4421	3.4714		

Assay Curve

$$y = (A-D)/(1+(x/C)^B) + D$$

Weight: NONE

A = 1.3089

B = 1.1954

C = 0.40557

D = 0.25266

R2 coef = 0.99490

50% = 0.617

