



## Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52589	Raccoon Lake SRA	8/22/2022	8/24/2022	< 0.30
AB52590	Cagles Mill Lake Beach	8/22/2022	8/24/2022	< 0.30
AB52591	Paynetown SRA	8/22/2022	8/24/2022	< 0.30
AB52592	Fairfax SRA	8/22/2022	8/24/2022	< 0.30
AB52593	Starve Hollow SRA	8/22/2022	8/24/2022	< 0.30
AB52594	Whitewater Memorial SP	8/23/2022	8/24/2022	< 0.30
AB52595	Quakertown SRA	8/23/2022	8/24/2022	< 0.30
AB52596	Mounds SRA	8/23/2022	8/24/2022	< 0.30
AB52597	Hardy Lake SRA	8/23/2022	8/24/2022	< 0.30
AB52598	Cagles Mill Lake Beach (Field Duplicate)	8/22/2022	8/24/2022	< 0.30
AB52599	Field Blank	8/22/2022	8/24/2022	< 0.30
AB52600	Ft. Ben Harrison SP Dog Lake	8/23/2022	8/24/2022	< 0.30
AB52629	Kunkel Lake @ Oubache SP	8/23/2022	8/24/2022	< 0.30
AB52630	Lincoln State Park	8/22/2022	8/24/2022	< 0.30

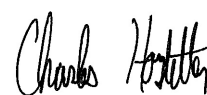
## Test Information

Request: 8/24/2022 6:16:04 PM  
Date: 8/24/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.268 Abs	0.006 µg/L	R <sup>2</sup> =0.99382, 100.1			M22B127(
MCT Std 0	MICROCYSTINS ADDA 54	1.264 Abs [1.2660] {0.2 C	0.009 µg/L [0.007]	R <sup>2</sup> =0.99382, 99.84			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.077 Abs	0.124 µg/L	R <sup>2</sup> =0.99382, 85.07			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.045 Abs [1.0610] {2.1 C	0.145 µg/L [0.134]	R <sup>2</sup> =0.99382, 82.54			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.742 Abs	0.418 µg/L	R <sup>2</sup> =0.99382, 58.61			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.713 Abs [0.7275] {2.8 C	0.458 µg/L [0.438]	R <sup>2</sup> =0.99382, 56.31			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.482 Abs	1.057 µg/L	R <sup>2</sup> =0.99382, 38.07			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.501 Abs [0.4915] {2.7 C	0.972 µg/L [1.015]	R <sup>2</sup> =0.99382, 39.57			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.425 Abs	1.407 µg/L	R <sup>2</sup> =0.99382, 33.57			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.412 Abs [0.4185] {2.2 C	1.518 µg/L [1.462]	R <sup>2</sup> =0.99382, 32.54			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.269 Abs	> 5.000 µg/L	21.248 %Abs			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.260 Abs [0.2645] {2.4 C	> 5.000 µg/L	20.537 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.207 Abs	0.047 µg/L	95.340 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.170 Abs [1.1885] {2.2 C	0.069 µg/L [0.058]	92.417 %Abs [93.8			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.794 Abs	0.355 µg/L	62.717 %Abs			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.799 Abs [0.7965] {0.4 C	0.349 µg/L [0.352]	63.112 %Abs [62.9			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.727 Abs	0.438 µg/L	57.425 %Abs			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.745 Abs [0.7360] {1.7 C	0.414 µg/L [0.426]	58.847 %Abs [58.1			M22B127(

## Note

Signature



Charles Hostetter 8/25/22

# Test Report (by Request)

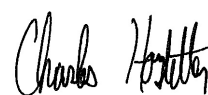
## Test Information

Request: 8/24/2022 6:18:27 PM  
Date: 8/24/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB52589	MICROCYSTINS ADDA 54	1.212 Abs	0.044 µg/L	Low, 95.735 %Abs		0.300 - 5.000	M22B127(
AB52589	MICROCYSTINS ADDA 54	1.170 Abs [1.1910] {2.5 C	0.069 µg/L [0.056]	Low, 92.417 %Abs		0.300 - 5.000	M22B127(
AB52590	MICROCYSTINS ADDA 54	1.099 Abs	0.111 µg/L	Low, 86.809 %Abs		0.300 - 5.000	M22B127(
AB52590	MICROCYSTINS ADDA 54	1.062 Abs [1.0805] {2.4 C	0.134 µg/L [0.123]	Low, 83.886 %Abs		0.300 - 5.000	M22B127(
AB52591	MICROCYSTINS ADDA 54	1.139 Abs	0.087 µg/L	Low, 89.968 %Abs		0.300 - 5.000	M22B127(
AB52591	MICROCYSTINS ADDA 54	1.125 Abs [1.1320] {0.9 C	0.095 µg/L [0.091]	Low, 88.863 %Abs		0.300 - 5.000	M22B127(
AB52592	MICROCYSTINS ADDA 54	1.188 Abs	0.058 µg/L	Low, 93.839 %Abs		0.300 - 5.000	M22B127(
AB52592	MICROCYSTINS ADDA 54	1.201 Abs [1.1945] {0.8 C	0.050 µg/L [0.054]	Low, 94.866 %Abs		0.300 - 5.000	M22B127(
AB52593	MICROCYSTINS ADDA 54	1.176 Abs	0.065 µg/L	Low, 92.891 %Abs		0.300 - 5.000	M22B127(
AB52593	MICROCYSTINS ADDA 54	1.151 Abs [1.1635] {1.5 C	0.080 µg/L [0.072]	Low, 90.916 %Abs		0.300 - 5.000	M22B127(
AB52594	MICROCYSTINS ADDA 54	1.138 Abs	0.087 µg/L	Low, 89.889 %Abs		0.300 - 5.000	M22B127(
AB52594	MICROCYSTINS ADDA 54	1.121 Abs [1.1295] {1.1 C	0.098 µg/L [0.093]	Low, 88.547 %Abs		0.300 - 5.000	M22B127(
AB52594MS	MICROCYSTINS ADDA 54	0.632 Abs	0.596 µg/L	49.921 %Abs		0.300 - 5.000	M22B127(
AB52594MS	MICROCYSTINS ADDA 54	0.642 Abs [0.6370] {1.1 C	0.576 µg/L [0.586]	50.711 %Abs [50.3		0.300 - 5.000	M22B127(
AB52594MSD	MICROCYSTINS ADDA 54	0.706 Abs	0.468 µg/L	55.766 %Abs		0.300 - 5.000	M22B127(
AB52594MSD	MICROCYSTINS ADDA 54	0.701 Abs [0.7035] {0.5 C	0.476 µg/L [0.472]	55.371 %Abs [55.5		0.300 - 5.000	M22B127(
AB52595	MICROCYSTINS ADDA 54	1.058 Abs	0.136 µg/L	Low, 83.570 %Abs		0.300 - 5.000	M22B127(
AB52595	MICROCYSTINS ADDA 54	1.046 Abs [1.0520] {0.8 C	0.144 µg/L [0.140]	Low, 82.622 %Abs		0.300 - 5.000	M22B127(
AB52596	MICROCYSTINS ADDA 54	1.035 Abs	0.151 µg/L	Low, 81.754 %Abs		0.300 - 5.000	M22B127(
AB52596	MICROCYSTINS ADDA 54	1.036 Abs [1.0355] {0.1 C	0.151 µg/L [0.151]	Low, 81.833 %Abs		0.300 - 5.000	M22B127(
AB52597	MICROCYSTINS ADDA 54	1.112 Abs	0.103 µg/L	Low, 87.836 %Abs		0.300 - 5.000	M22B127(
AB52597	MICROCYSTINS ADDA 54	1.122 Abs [1.1170] {0.6 C	0.097 µg/L [0.100]	Low, 88.626 %Abs		0.300 - 5.000	M22B127(
AB52598	MICROCYSTINS ADDA 54	1.170 Abs	0.069 µg/L	Low, 92.417 %Abs		0.300 - 5.000	M22B127(
AB52598	MICROCYSTINS ADDA 54	1.141 Abs [1.1555] {1.8 C	0.086 µg/L [0.078]	Low, 90.126 %Abs		0.300 - 5.000	M22B127(
AB52599	MICROCYSTINS ADDA 54	1.235 Abs	0.029 µg/L	Low, 97.551 %Abs		0.300 - 5.000	M22B127(
AB52599	MICROCYSTINS ADDA 54	1.223 Abs [1.2290] {0.7 C	0.037 µg/L [0.033]	Low, 96.603 %Abs		0.300 - 5.000	M22B127(
AB52600	MICROCYSTINS ADDA 54	1.164 Abs	0.072 µg/L	Low, 91.943 %Abs		0.300 - 5.000	M22B127(
AB52600	MICROCYSTINS ADDA 54	1.149 Abs [1.1565] {0.9 C	0.081 µg/L [0.076]	Low, 90.758 %Abs		0.300 - 5.000	M22B127(
AB52629	MICROCYSTINS ADDA 54	1.121 Abs	0.098 µg/L	Low, 88.547 %Abs		0.300 - 5.000	M22B127(
AB52629	MICROCYSTINS ADDA 54	1.111 Abs [1.1160] {0.6 C	0.104 µg/L [0.101]	Low, 87.757 %Abs		0.300 - 5.000	M22B127(
AB52630	MICROCYSTINS ADDA 54	1.187 Abs	0.059 µg/L	Low, 93.760 %Abs		0.300 - 5.000	M22B127(
AB52630	MICROCYSTINS ADDA 54	1.164 Abs [1.1755] {1.4 C	0.072 µg/L [0.065]	Low, 91.943 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.750 Abs	0.408 µg/L	59.242 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.578 Abs [0.6640] {18.3	0.719 µg/L [0.563]	45.656 %Abs [52.4		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.243 Abs	0.024 µg/L	Low, 98.183 %Abs		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.216 Abs [1.2295] {1.6 C	0.041 µg/L [0.032]	Low, 96.051 %Abs		0.300 - 5.000	M22B127(

## Note

Signature



Charles Hostetter 8/25/22

## 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	
8/24/2022 6:16:04 PM					
MCT Std 0	1.268 Abs	0.006 µg/L	R <sup>2</sup> =0.99382, 100.158 %Abs	RK1:23->A01@2	
MCT Std 0	1.264 Abs [1.2660] {0.2 CV}	0.009 µg/L [0.007] {28.3 CV}	R <sup>2</sup> =0.99382, 99.842 %Abs	RK1:23->B01@2	
MCT Std 1	1.077 Abs	0.124 µg/L	R <sup>2</sup> =0.99382, 85.071 %Abs	RK1:24->C01@2	
MCT Std 1	1.045 Abs [1.0610] {2.1 CV}	0.145 µg/L [0.134] {11.0 CV}	R <sup>2</sup> =0.99382, 82.543 %Abs	RK1:24->D01@2	
MCT Std 2	0.742 Abs	0.418 µg/L	R <sup>2</sup> =0.99382, 58.610 %Abs	RK1:25->E01@2	
MCT Std 2	0.713 Abs [0.7275] {2.8 CV}	0.458 µg/L [0.438] {6.5 CV}	R <sup>2</sup> =0.99382, 56.319 %Abs	RK1:25->F01@3	
MCT Std 3	0.482 Abs	1.057 µg/L	R <sup>2</sup> =0.99382, 38.073 %Abs	RK1:26->G01@3	
MCT Std 3	0.501 Abs [0.4915] {2.7 CV}	0.972 µg/L [1.015] {5.9 CV}	R <sup>2</sup> =0.99382, 39.573 %Abs	RK1:26->H01@3	
MCT Std 4	0.425 Abs	1.407 µg/L	R <sup>2</sup> =0.99382, 33.570 %Abs	RK1:27->A02@2	
MCT Std 4	0.412 Abs [0.4185] {2.2 CV}	1.518 µg/L [1.462] {5.4 CV}	R <sup>2</sup> =0.99382, 32.543 %Abs	RK1:27->B02@2	
MCT Std 5	0.269 Abs	> 5.000 µg/L	21.248 %Abs	RK1:28->C02@2	
MCT Std 5	0.260 Abs [0.2645] {2.4 CV}	> 5.000 µg/L	20.537 %Abs	RK1:28->D02@2	
*****					
8/24/2022 6:16:04 PM					
MCT 546 LRB 1	1.207 Abs	0.047 µg/L	95.340 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.170 Abs [1.1885] {2.2 CV}	0.069 µg/L [0.058] {26.8 CV}	92.417 %Abs [93.878 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.794 Abs	0.355 µg/L	62.717 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.799 Abs [0.7965] {0.4 CV}	0.349 µg/L [0.352] {1.2 CV}	63.112 %Abs [62.915 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.727 Abs	0.438 µg/L	57.425 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.745 Abs [0.7360] {1.7 CV}	0.414 µg/L [0.426] {4.0 CV}	58.847 %Abs [58.136 %Abs]	RK1:31->B03@2	
*****					
Statistic					
MCT Std 0 [MEAN]	1.2660	0.0075			
MCT Std 0 [SD]	0.0028	0.0021			
MCT Std 0 [%CV]	0.2234	28.2843			
MCT Std 1 [MEAN]	1.0610	0.1345			
MCT Std 1 [SD]	0.0226	0.0148			
MCT Std 1 [%CV]	2.1327	11.0403			
MCT Std 1 [%DIFF]		-10.3333			
MCT Std 2 [MEAN]	0.7275	0.4380			
MCT Std 2 [SD]	0.0205	0.0283			
MCT Std 2 [%CV]	2.8187	6.4576			
MCT Std 2 [%DIFF]		9.5000			
MCT Std 3 [MEAN]	0.4915	1.0145			
MCT Std 3 [SD]	0.0134	0.0601			
MCT Std 3 [%CV]	2.7335	5.9245			
MCT Std 3 [%DIFF]		1.4500			
MCT Std 4 [MEAN]	0.4185	1.4625			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0092	0.0785			
MCT Std 4 [%CV]	2.1965	5.3668			
MCT Std 4 [%DIFF]		-26.8750			
MCT Std 5 [MEAN]	0.2645				
MCT Std 5 [SD]	0.0064				
MCT Std 5 [%CV]	2.4060				
MCT 546 LRB 1 [MEAN]	1.1885	0.0580			
MCT 546 LRB 1 [SD]	0.0262	0.0156			
MCT 546 LRB 1 [%CV]	2.2013	26.8213			
MCT 546 Low-CV [MEAN]	0.7965	0.3520			
MCT 546 Low-CV [SD]	0.0035	0.0042			
MCT 546 Low-CV [%CV]	0.4439	1.2053			
MCT 546 LFB 1 [MEAN]	0.7360	0.4260			
MCT 546 LFB 1 [SD]	0.0127	0.0170			
MCT 546 LFB 1 [%CV]	1.7293	3.9837			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$   
 Weight: NONE  
 A = 1.2734  
 B = 1.2543  
 C = 0.38936  
 D = 0.25573  
 R2 coef = 0.99382  
 50% = 0.594

