



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

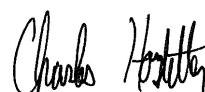
Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52176	Kunkel Lake @ Oubache State Park	8/1/2022	8/4/2022	< 0.30
AB52177	Pokagon State Park	8/1/2022	8/4/2022	< 0.30
AB52178	Potawatomi Inn's Beach	8/1/2022	8/4/2022	< 0.30
AB52179	Chain O'Lakes SP	8/1/2022	8/4/2022	< 0.30
AB52180	Potato Creek State Park	8/2/2022	8/4/2022	< 0.30
AB52181	Lost Bridge West SRA	8/2/2022	8/4/2022	< 0.30
AB52182	Mississinewa Lake Miami SRA	8/2/2022	8/4/2022	< 0.30
AB52183	Kunkel Lake @ Oubache State Park (Field Dup)	8/1/2022	8/4/2022	< 0.30
AB52184	Field Blank	8/1/2022	8/4/2022	< 0.30
AB52185	Patoka SRA Beach	8/1/2022	8/4/2022	< 0.30

Test Information

Request: 8/4/2022 12:38:14 PM
Date: 8/4/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.407 Abs	0.026 µg/L	$R^2=0.99715$, 97.23			M22B127(
MCT Std 0	MICROCYSTINS ADDA 54	1.487 Abs [1.4470] {3.9 C	0.000 µg/L [0.013]	$R^2=0.99715$, 102.7			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.216 Abs	0.126 µg/L	$R^2=0.99715$, 84.03			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.168 Abs [1.1920] {2.8 C	0.154 µg/L [0.140]	$R^2=0.99715$, 80.71			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.859 Abs	0.409 µg/L	$R^2=0.99715$, 59.36			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.833 Abs [0.8460] {2.2 C	0.441 µg/L [0.425]	$R^2=0.99715$, 57.56			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.578 Abs	0.975 µg/L	$R^2=0.99715$, 39.94			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.550 Abs [0.5640] {3.5 C	1.084 µg/L [1.030]	$R^2=0.99715$, 38.01			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.455 Abs	1.656 µg/L	$R^2=0.99715$, 31.44			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.465 Abs [0.4600] {1.5 C	1.573 µg/L [1.615]	$R^2=0.99715$, 32.13			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.301 Abs	> 5.000 µg/L	20.802 %Abs			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.294 Abs [0.2975] {1.7 C	> 5.000 µg/L	20.318 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.347 Abs	0.057 µg/L	93.089 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.362 Abs [1.3545] {0.8 C	0.049 µg/L [0.053]	94.126 %Abs [93.6			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.892 Abs	0.372 µg/L	61.645 %Abs			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.906 Abs [0.8990] {1.1 C	0.358 µg/L [0.365]	62.612 %Abs [62.1			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.830 Abs	0.444 µg/L	57.360 %Abs			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.829 Abs [0.8295] {0.1 C	0.446 µg/L [0.445]	57.291 %Abs [57.3			M22B127(

Note



Signature

Test Information

Request: 8/4/2022 12:39:04 PM
Date: 8/4/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB52176	MICROCYSTINS ADDA 54	1.295 Abs	0.083 µg/L	Low, 89.496 %Abs		0.300 - 5.000	M22B127(
AB52176	MICROCYSTINS ADDA 54	0.960 Abs [1.1275] {21.0	0.306 µg/L [0.194]	66.344 %Abs [Low,		0.300 - 5.000	M22B127(
AB52177	MICROCYSTINS ADDA 54	1.138 Abs	0.172 µg/L	Low, 78.645 %Abs		0.300 - 5.000	M22B127(
AB52177	MICROCYSTINS ADDA 54	1.140 Abs [1.1390] {0.1 C	0.171 µg/L [0.171]	Low, 78.784 %Abs		0.300 - 5.000	M22B127(
AB52178	MICROCYSTINS ADDA 54	1.192 Abs	0.139 µg/L	Low, 82.377 %Abs		0.300 - 5.000	M22B127(
AB52178	MICROCYSTINS ADDA 54	1.148 Abs [1.1700] {2.7 C	0.166 µg/L [0.153]	Low, 79.337 %Abs		0.300 - 5.000	M22B127(
AB52179	MICROCYSTINS ADDA 54	1.328 Abs	0.066 µg/L	Low, 91.776 %Abs		0.300 - 5.000	M22B127(
AB52179	MICROCYSTINS ADDA 54	1.360 Abs [1.3440] {1.7 C	0.050 µg/L [0.058]	Low, 93.988 %Abs		0.300 - 5.000	M22B127(
AB52180	MICROCYSTINS ADDA 54	1.343 Abs	0.059 µg/L	Low, 92.813 %Abs		0.300 - 5.000	M22B127(
AB52180	MICROCYSTINS ADDA 54	1.292 Abs [1.3175] {2.7 C	0.085 µg/L [0.072]	Low, 89.288 %Abs		0.300 - 5.000	M22B127(
AB52180MS	MICROCYSTINS ADDA 54	0.706 Abs	0.639 µg/L	48.791 %Abs		0.300 - 5.000	M22B127(
AB52180MS	MICROCYSTINS ADDA 54	0.671 Abs [0.6885] {3.6 C	0.712 µg/L [0.676]	46.372 %Abs [47.5		0.300 - 5.000	M22B127(
AB52180MSD	MICROCYSTINS ADDA 54	0.697 Abs	0.657 µg/L	48.169 %Abs		0.300 - 5.000	M22B127(
AB52180MSD	MICROCYSTINS ADDA 54	0.692 Abs [0.6945] {0.5 C	0.667 µg/L [0.662]	47.823 %Abs [47.9		0.300 - 5.000	M22B127(
AB52181	MICROCYSTINS ADDA 54	0.971 Abs	0.296 µg/L	Low, 67.104 %Abs		0.300 - 5.000	M22B127(
AB52181	MICROCYSTINS ADDA 54	0.971 Abs [0.9710] {0.0 C	0.296 µg/L [0.296]	Low, 67.104 %Abs		0.300 - 5.000	M22B127(
AB52182	MICROCYSTINS ADDA 54	1.082 Abs	0.209 µg/L	Low, 74.775 %Abs		0.300 - 5.000	M22B127(
AB52182	MICROCYSTINS ADDA 54	1.036 Abs [1.0590] {3.1 C	0.243 µg/L [0.226]	Low, 71.596 %Abs		0.300 - 5.000	M22B127(
AB52183	MICROCYSTINS ADDA 54	1.187 Abs	0.142 µg/L	Low, 82.032 %Abs		0.300 - 5.000	M22B127(
AB52183	MICROCYSTINS ADDA 54	1.158 Abs [1.1725] {1.7 C	0.160 µg/L [0.151]	Low, 80.028 %Abs		0.300 - 5.000	M22B127(
AB52184	MICROCYSTINS ADDA 54	1.359 Abs	0.051 µg/L	Low, 93.918 %Abs		0.300 - 5.000	M22B127(
AB52184	MICROCYSTINS ADDA 54	1.371 Abs [1.3650] {0.6 C	0.045 µg/L [0.048]	Low, 94.748 %Abs		0.300 - 5.000	M22B127(
AB52185	MICROCYSTINS ADDA 54	1.403 Abs	0.028 µg/L	Low, 96.959 %Abs		0.300 - 5.000	M22B127(
AB52185	MICROCYSTINS ADDA 54	1.394 Abs [1.3985] {0.5 C	0.033 µg/L [0.031]	Low, 96.337 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.821 Abs	0.456 µg/L	56.738 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.749 Abs [0.7850] {6.5 C	0.562 µg/L [0.509]	51.762 %Abs [54.2		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.290 Abs	0.086 µg/L	Low, 89.150 %Abs		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.339 Abs [1.3145] {2.6 C	0.061 µg/L [0.074]	Low, 92.536 %Abs		0.300 - 5.000	M22B127(

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: M22B1270

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
8/4/2022 12:38:14 PM					
MCT Std 0	1.407 Abs	0.026 µg/L	R^2=0.99715, 97.236 %Abs	RK1:23->A01@2	
MCT Std 0	1.487 Abs [1.4470] {3.9 CV}	0.000 µg/L [0.013] {141.4 CV}	R^2=0.99715, 102.764 %Abs	RK1:23->B01@2	
MCT Std 1	1.216 Abs	0.126 µg/L	R^2=0.99715, 84.036 %Abs	RK1:24->C01@2	
MCT Std 1	1.168 Abs [1.1920] {2.8 CV}	0.154 µg/L [0.140] {14.1 CV}	R^2=0.99715, 80.719 %Abs	RK1:24->D01@2	
MCT Std 2	0.859 Abs	0.409 µg/L	R^2=0.99715, 59.364 %Abs	RK1:25->E01@2	
MCT Std 2	0.833 Abs [0.8460] {2.2 CV}	0.441 µg/L [0.425] {5.3 CV}	R^2=0.99715, 57.567 %Abs	RK1:25->F01@3	
MCT Std 3	0.578 Abs	0.975 µg/L	R^2=0.99715, 39.945 %Abs	RK1:26->G01@3	
MCT Std 3	0.550 Abs [0.5640] {3.5 CV}	1.084 µg/L [1.030] {7.5 CV}	R^2=0.99715, 38.010 %Abs	RK1:26->H01@3	
MCT Std 4	0.455 Abs	1.656 µg/L	R^2=0.99715, 31.444 %Abs	RK1:27->A02@2	
MCT Std 4	0.465 Abs [0.4600] {1.5 CV}	1.573 µg/L [1.615] {3.6 CV}	R^2=0.99715, 32.135 %Abs	RK1:27->B02@2	
MCT Std 5	0.301 Abs	> 5.000 µg/L	20.802 %Abs	RK1:28->C02@2	
MCT Std 5	0.294 Abs [0.2975] {1.7 CV}	> 5.000 µg/L	20.318 %Abs	RK1:28->D02@2	

8/4/2022 12:38:14 PM					
MCT 546 LRB 1	1.347 Abs	0.057 µg/L	93.089 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.362 Abs [1.3545] {0.8 CV}	0.049 µg/L [0.053] {10.7 CV}	94.126 %Abs [93.607 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.892 Abs	0.372 µg/L	61.645 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.906 Abs [0.8990] {1.1 CV}	0.358 µg/L [0.365] {2.7 CV}	62.612 %Abs [62.129 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.830 Abs	0.444 µg/L	57.360 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.829 Abs [0.8295] {0.1 CV}	0.446 µg/L [0.445] {0.3 CV}	57.291 %Abs [57.325 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.4470	0.0130			
MCT Std 0 [SD]	0.0566	0.0184			
MCT Std 0 [%CV]	3.9094	141.4214			
MCT Std 1 [MEAN]	1.1920	0.1400			
MCT Std 1 [SD]	0.0339	0.0198			
MCT Std 1 [%CV]	2.8474	14.1421			
MCT Std 1 [%DIFF]		-6.6667			
MCT Std 2 [MEAN]	0.8460	0.4250			
MCT Std 2 [SD]	0.0184	0.0226			
MCT Std 2 [%CV]	2.1731	5.3241			
MCT Std 2 [%DIFF]		6.2500			
MCT Std 3 [MEAN]	0.5640	1.0295			
MCT Std 3 [SD]	0.0198	0.0771			
MCT Std 3 [%CV]	3.5105	7.4866			
MCT Std 3 [%DIFF]		2.9500			
MCT Std 4 [MEAN]	0.4600	1.6145			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0071	0.0587		
MCT Std 4 [%CV]	1.5372	3.6352		
MCT Std 4 [%DIFF]		-19.2750		
MCT Std 5 [MEAN]	0.2975			
MCT Std 5 [SD]	0.0049			
MCT Std 5 [%CV]	1.6638			
MCT 546 LRB 1 [MEAN]	1.3545	0.0530		
MCT 546 LRB 1 [SD]	0.0106	0.0057		
MCT 546 LRB 1 [%CV]	0.7831	10.6733		
MCT 546 Low-CV [MEAN]	0.8990	0.3650		
MCT 546 Low-CV [SD]	0.0099	0.0099		
MCT 546 Low-CV [%CV]	1.1012	2.7122		
MCT 546 LFB 1 [MEAN]	0.8295	0.4450		
MCT 546 LFB 1 [SD]	0.0007	0.0014		
MCT 546 LFB 1 [%CV]	0.0852	0.3178		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4523
 B = 1.1766
 C = 0.41173
 D = 0.26107
 R2 coef = 0.99715
 50% = 0.606

