



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB51886	Mississinewa Lake Miami SRA	7/5/2022	7/6/2022	3.35
AB51887	Potato Creek State Park	7/5/2022	7/6/2022	< 0.30
AB51888	Lost Bridge West SRA	7/5/2022	7/6/2022	0.58
AB51884	Potato Creek State Park (Field Dup)	7/5/2022	7/6/2022	< 0.30
AB51885	Field Blank	7/5/2022	7/6/2022	< 0.30

Test Information

Request: 7/6/2022 3:03:38 PM
Date: 7/6/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.284 Abs	0.016 µg/L	R ² =0.99659, 99.4%			M22B127(
MCT Std 0	MICROCYSTINS ADDA 54	1.298 Abs [1.2910] {0.8 C	0.001 µg/L [0.009]	R ² =0.99659, 100.5%			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.114 Abs	0.131 µg/L	R ² =0.99659, 86.2%			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.100 Abs [1.1070] {0.9 C	0.141 µg/L [0.136]	R ² =0.99659, 85.2%			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.780 Abs	0.426 µg/L	R ² =0.99659, 60.4%			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.778 Abs [0.7790] {0.2 C	0.429 µg/L [0.428]	R ² =0.99659, 60.2%			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.511 Abs	1.020 µg/L	R ² =0.99659, 39.5%			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.515 Abs [0.5130] {0.6 C	1.004 µg/L [1.012]	R ² =0.99659, 39.8%			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.416 Abs	1.586 µg/L	R ² =0.99659, 32.2%			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.411 Abs [0.4135] {0.9 C	1.631 µg/L [1.609]	R ² =0.99659, 31.8%			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.280 Abs	> 5.000 µg/L	21.689 %Abs			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.263 Abs [0.2715] {4.4 C	> 5.000 µg/L	20.372 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.244 Abs	0.046 µg/L	96.359 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.244 Abs [1.2440] {0.0 C	0.046 µg/L [0.046]	96.359 %Abs [96.3			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.836 Abs	0.361 µg/L	64.756 %Abs			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.828 Abs [0.8320] {0.7 C	0.370 µg/L [0.366]	64.136 %Abs [64.4			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.729 Abs	0.496 µg/L	56.468 %Abs			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.710 Abs [0.7195] {1.9 C	0.525 µg/L [0.510]	54.996 %Abs [55.7			M22B127(

Note

Signature 

David Jordan 7/7/2021

Test Information

Request: 7/6/2022 3:04:10 PM
Date: 7/6/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB51886	MICROCYSTINS ADDA 54	0.321 Abs	3.351 µg/L	24.864 %Abs		0.300 - 5.000	M22B127(
AB51886	MICROCYSTINS ADDA 54	0.321 Abs [0.3210] {0.0 C	3.351 µg/L [3.351]	24.864 %Abs [24.8		0.300 - 5.000	M22B127(
AB51886MS	MICROCYSTINS ADDA 54	0.292 Abs	> 5.000 µg/L	22.618 %Abs, Out(l		0.300 - 5.000	M22B127(
AB51886MS	MICROCYSTINS ADDA 54	0.271 Abs [0.2815] {5.3 C	> 5.000 µg/L	20.991 %Abs, Out(l		0.300 - 5.000	M22B127(
AB51886MSD	MICROCYSTINS ADDA 54	0.267 Abs	> 5.000 µg/L	20.682 %Abs, Out(l		0.300 - 5.000	M22B127(
AB51886MSD	MICROCYSTINS ADDA 54	0.271 Abs [0.2690] {1.1 C	> 5.000 µg/L	20.991 %Abs, Out(l		0.300 - 5.000	M22B127(
AB51887	MICROCYSTINS ADDA 54	1.179 Abs	0.089 µg/L	Low, 91.325 %Abs		0.300 - 5.000	M22B127(
AB51887	MICROCYSTINS ADDA 54	1.195 Abs [1.1870] {1.0 C	0.078 µg/L [0.083]	Low, 92.564 %Abs		0.300 - 5.000	M22B127(
AB51888	MICROCYSTINS ADDA 54	0.695 Abs	0.549 µg/L	53.834 %Abs		0.300 - 5.000	M22B127(
AB51888	MICROCYSTINS ADDA 54	0.666 Abs [0.6805] {3.0 C	0.600 µg/L [0.575]	51.588 %Abs [52.7		0.300 - 5.000	M22B127(
AB51884	MICROCYSTINS ADDA 54	1.151 Abs	0.107 µg/L	Low, 89.156 %Abs		0.300 - 5.000	M22B127(
AB51884	MICROCYSTINS ADDA 54	1.111 Abs [1.1310] {2.5 C	0.133 µg/L [0.120]	Low, 86.057 %Abs		0.300 - 5.000	M22B127(
AB51885	MICROCYSTINS ADDA 54	1.169 Abs	0.095 µg/L	Low, 90.550 %Abs		0.300 - 5.000	M22B127(
AB51885	MICROCYSTINS ADDA 54	1.167 Abs [1.1680] {0.1 C	0.097 µg/L [0.096]	Low, 90.395 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.717 Abs	0.514 µg/L	55.538 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.695 Abs [0.7060] {2.2 C	0.549 µg/L [0.531]	53.834 %Abs [54.6		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.236 Abs	0.051 µg/L	Low, 95.740 %Abs		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.208 Abs [1.2220] {1.6 C	0.070 µg/L [0.060]	Low, 93.571 %Abs		0.300 - 5.000	M22B127(

Note

Signature

David Jordan

David Jordan 7/7/2021

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	
7/6/2022 3:03:38 PM					
MCT Std 0	1.284 Abs	0.016 µg/L	R ² =0.99659, 99.458 %Abs	RK1:23->A01@2	
MCT Std 0	1.298 Abs [1.2910] {0.8 CV}	0.001 µg/L [0.009] {124.8 CV}	R ² =0.99659, 100.542 %Abs	RK1:23->B01@2	
MCT Std 1	1.114 Abs	0.131 µg/L	R ² =0.99659, 86.290 %Abs	RK1:24->C01@2	
MCT Std 1	1.100 Abs [1.1070] {0.9 CV}	0.141 µg/L [0.136] {5.2 CV}	R ² =0.99659, 85.205 %Abs	RK1:24->D01@2	
MCT Std 2	0.780 Abs	0.426 µg/L	R ² =0.99659, 60.418 %Abs	RK1:25->E01@2	
MCT Std 2	0.778 Abs [0.7790] {0.2 CV}	0.429 µg/L [0.428] {0.5 CV}	R ² =0.99659, 60.263 %Abs	RK1:25->F01@3	
MCT Std 3	0.511 Abs	1.020 µg/L	R ² =0.99659, 39.582 %Abs	RK1:26->G01@3	
MCT Std 3	0.515 Abs [0.5130] {0.6 CV}	1.004 µg/L [1.012] {1.1 CV}	R ² =0.99659, 39.892 %Abs	RK1:26->H01@3	
MCT Std 4	0.416 Abs	1.586 µg/L	R ² =0.99659, 32.223 %Abs	RK1:27->A02@2	
MCT Std 4	0.411 Abs [0.4135] {0.9 CV}	1.631 µg/L [1.609] {2.0 CV}	R ² =0.99659, 31.836 %Abs	RK1:27->B02@2	
MCT Std 5	0.280 Abs	> 5.000 µg/L	21.689 %Abs	RK1:28->C02@2	
MCT Std 5	0.263 Abs [0.2715] {4.4 CV}	> 5.000 µg/L	20.372 %Abs	RK1:28->D02@2	

7/6/2022 3:03:38 PM					
MCT 546 LRB 1	1.244 Abs	0.046 µg/L	96.359 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.244 Abs [1.2440] {0.0 CV}	0.046 µg/L [0.046] {0.0 CV}	96.359 %Abs [96.359 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.836 Abs	0.361 µg/L	64.756 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.828 Abs [0.8320] {0.7 CV}	0.370 µg/L [0.366] {1.7 CV}	64.136 %Abs [64.446 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.729 Abs	0.496 µg/L	56.468 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.710 Abs [0.7195] {1.9 CV}	0.525 µg/L [0.510] {4.0 CV}	54.996 %Abs [55.732 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.2910	0.0085			
MCT Std 0 [SD]	0.0099	0.0106			
MCT Std 0 [%CV]	0.7668	124.7835			
MCT Std 1 [MEAN]	1.1070	0.1360			
MCT Std 1 [SD]	0.0099	0.0071			
MCT Std 1 [%CV]	0.8943	5.1993			
MCT Std 1 [%DIFF]		-9.3333			
MCT Std 2 [MEAN]	0.7790	0.4275			
MCT Std 2 [SD]	0.0014	0.0021			
MCT Std 2 [%CV]	0.1815	0.4962			
MCT Std 2 [%DIFF]		6.8750			
MCT Std 3 [MEAN]	0.5130	1.0120			
MCT Std 3 [SD]	0.0028	0.0113			
MCT Std 3 [%CV]	0.5514	1.1180			
MCT Std 3 [%DIFF]		1.2000			
MCT Std 4 [MEAN]	0.4135	1.6085			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0035	0.0318			
MCT Std 4 [%CV]	0.8550	1.9782			
MCT Std 4 [%DIFF]		-19.5750			
MCT Std 5 [MEAN]	0.2715				
MCT Std 5 [SD]	0.0120				
MCT Std 5 [%CV]	4.4276				
MCT 546 LRB 1 [MEAN]	1.2440	0.0460			
MCT 546 LRB 1 [SD]	0.0000	0.0000			
MCT 546 LRB 1 [%CV]	0.0000	0.0000			
MCT 546 Low-CV [MEAN]	0.8320	0.3655			
MCT 546 Low-CV [SD]	0.0057	0.0064			
MCT 546 Low-CV [%CV]	0.6799	1.7412			
MCT 546 LFB 1 [MEAN]	0.7195	0.5105			
MCT 546 LFB 1 [SD]	0.0134	0.0205			
MCT 546 LFB 1 [%CV]	1.8673	4.0169			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.2982
 B = 1.2955
 C = 0.43233
 D = 0.25215
 R2 coef = 0.99659
 50% = 0.639

