



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB47949	Summit Lake - State Park	7/20/2021	7/20/2021	< 0.30
AB47950	Kunkel Beach @ Ouabache State Park	7/19/2021	7/20/2021	< 0.30
AB47951	Pokagon State Park	7/19/2021	7/20/2021	< 0.30
AB47952	Potawatomi Inn's Beach	7/19/2021	7/20/2021	< 0.30
AB47953	Chain O'Lakes SP	7/19/2021	7/20/2021	0.39
AB47954	Potato Creek State Park	7/19/2021	7/20/2021	< 0.30
AB47955	Lost Bridge West SRA	7/19/2021	7/20/2021	1.9
AB47956	Mississinewa Lake Miami SRA	7/19/2021	7/20/2021	< 0.30
AB47957	Lost Bridge West SRA (Field Dup)	7/19/2021	7/20/2021	1.8
AB47958	Field Blank	7/19/2021	7/20/2021	< 0.30
AB48042	Lincoln State Park	7/19/2021	7/20/2021	< 0.30
AB48043	Ferdinand State Forest Lake	7/19/2021	7/20/2021	< 0.30
AB48044	Patoka SRA Beach	7/19/2021	7/20/2021	< 0.30
AB48045	Ft. Ben Harrison SP Dog Lake - East	7/20/2021	7/20/2021	< 0.30

Test Report (by Request)

Test Information

Request: 7/20/2021 6:34:46 PM
 Date: 7/20/2021 - 7/20/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.537 Abs	0.000 µg/L	R^2=0.99769, 101.2			20J4209
MCT Std 0	MICROCYSTINS ADDA 54	1.499 Abs [1.5180] {1.8 C	0.012 µg/L [0.006]	R^2=0.99769, 98.74			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.275 Abs	0.125 µg/L	R^2=0.99769, 83.95			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.240 Abs [1.2575] {2.0 C	0.146 µg/L [0.135]	R^2=0.99769, 81.68			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	0.916 Abs	0.429 µg/L	R^2=0.99769, 60.34			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	0.897 Abs [0.9065] {1.5 C	0.453 µg/L [0.441]	R^2=0.99769, 59.05			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.657 Abs	0.943 µg/L	R^2=0.99769, 43.28			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.646 Abs [0.6515] {1.2 C	0.979 µg/L [0.961]	R^2=0.99769, 42.55			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.505 Abs	1.690 µg/L	R^2=0.99769, 33.26			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.474 Abs [0.4895] {4.5 C	1.958 µg/L [1.824]	R^2=0.99769, 31.22			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.340 Abs	> 5.000 µg/L	22.398 %Abs			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.312 Abs [0.3260] {6.1 C	> 5.000 µg/L	20.553 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.463 Abs	0.029 µg/L	96.377 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.431 Abs [1.4470] {1.6 C	0.044 µg/L [0.036]	94.269 %Abs [95.3			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.034 Abs	0.301 µg/L	68.116 %Abs			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.007 Abs [1.0205] {1.9 C	0.327 µg/L [0.314]	66.337 %Abs [67.2			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.820 Abs	0.568 µg/L	54.018 %Abs			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.787 Abs [0.8035] {2.9 C	0.627 µg/L [0.597]	51.845 %Abs [52.9			20J4209

Note

Signature

Test Report (by Request)

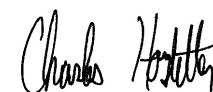
Test Information

Request: 7/20/2021 6:35:49 PM
Date: 7/20/2021 - 7/20/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB47949	MICROCYSTINS ADDA 54	1.399 Abs	0.059 µg/L	Low, 92.161 %Abs		0.300 - 5.000	20J4209
AB47949	MICROCYSTINS ADDA 54	1.381 Abs [1.3900] {0.9 C	0.068 µg/L [0.064]			0.300 - 5.000	20J4209
AB47950	MICROCYSTINS ADDA 54	1.414 Abs	0.052 µg/L	Low, 93.149 %Abs		0.300 - 5.000	20J4209
AB47950	MICROCYSTINS ADDA 54	1.362 Abs [1.3880] {2.6 C	0.077 µg/L [0.065]			0.300 - 5.000	20J4209
AB47951	MICROCYSTINS ADDA 54	1.254 Abs	0.137 µg/L	Low, 82.609 %Abs		0.300 - 5.000	20J4209
AB47951	MICROCYSTINS ADDA 54	1.241 Abs [1.2475] {0.7 C	0.145 µg/L [0.141]			0.300 - 5.000	20J4209
AB47952	MICROCYSTINS ADDA 54	1.231 Abs	0.151 µg/L	Low, 81.094 %Abs		0.300 - 5.000	20J4209
AB47952	MICROCYSTINS ADDA 54	1.227 Abs [1.2290] {0.2 C	0.154 µg/L [0.153]			0.300 - 5.000	20J4209
AB47953	MICROCYSTINS ADDA 54	0.966 Abs	0.370 µg/L	63.636 %Abs		0.300 - 5.000	20J4209
AB47953	MICROCYSTINS ADDA 54	0.930 Abs [0.9480] {2.7 C	0.412 µg/L [0.391]	61.265 %Abs [62.4		0.300 - 5.000	20J4209
AB47954	MICROCYSTINS ADDA 54	1.370 Abs	0.073 µg/L	Low, 90.250 %Abs		0.300 - 5.000	20J4209
AB47954	MICROCYSTINS ADDA 54	1.325 Abs [1.3475] {2.4 C	0.097 µg/L [0.085]			0.300 - 5.000	20J4209
AB47954MS	MICROCYSTINS ADDA 54	0.743 Abs	0.716 µg/L	48.946 %Abs		0.300 - 5.000	20J4209
AB47954MS	MICROCYSTINS ADDA 54	0.732 Abs [0.7375] {1.1 C	0.741 µg/L [0.729]	48.221 %Abs [48.5		0.300 - 5.000	20J4209
AB47954MSD	MICROCYSTINS ADDA 54	0.753 Abs	0.695 µg/L	49.605 %Abs		0.300 - 5.000	20J4209
AB47954MSD	MICROCYSTINS ADDA 54	0.744 Abs [0.7485] {0.9 C	0.714 µg/L [0.704]	49.012 %Abs [49.3		0.300 - 5.000	20J4209
AB47955	MICROCYSTINS ADDA 54	0.490 Abs	1.811 µg/L	32.279 %Abs		0.300 - 5.000	20J4209
AB47955	MICROCYSTINS ADDA 54	0.479 Abs [0.4845] {1.6 C	1.910 µg/L [1.860]	31.555 %Abs [31.9		0.300 - 5.000	20J4209
AB47956	MICROCYSTINS ADDA 54	1.217 Abs	0.160 µg/L	Low, 80.171 %Abs		0.300 - 5.000	20J4209
AB47956	MICROCYSTINS ADDA 54	1.222 Abs [1.2195] {0.3 C	0.157 µg/L [0.159]			0.300 - 5.000	20J4209
AB47957	MICROCYSTINS ADDA 54	0.492 Abs	1.794 µg/L	32.411 %Abs		0.300 - 5.000	20J4209
AB47957	MICROCYSTINS ADDA 54	0.481 Abs [0.4865] {1.6 C	1.892 µg/L [1.843]	31.686 %Abs [32.0		0.300 - 5.000	20J4209
AB47958	MICROCYSTINS ADDA 54	1.459 Abs	0.031 µg/L	Low, 96.113 %Abs		0.300 - 5.000	20J4209
AB47958	MICROCYSTINS ADDA 54	1.511 Abs [1.4850] {2.5 C	0.006 µg/L [0.019]			0.300 - 5.000	20J4209
AB48042	MICROCYSTINS ADDA 54	1.395 Abs	0.061 µg/L	Low, 91.897 %Abs		0.300 - 5.000	20J4209
AB48042	MICROCYSTINS ADDA 54	1.378 Abs [1.3865] {0.9 C	0.069 µg/L [0.065]			0.300 - 5.000	20J4209
AB48043	MICROCYSTINS ADDA 54	1.327 Abs	0.096 µg/L	Low, 87.418 %Abs		0.300 - 5.000	20J4209
AB48043	MICROCYSTINS ADDA 54	1.326 Abs [1.3265] {0.1 C	0.096 µg/L [0.096]			0.300 - 5.000	20J4209
AB48044	MICROCYSTINS ADDA 54	1.372 Abs	0.072 µg/L	Low, 90.382 %Abs		0.300 - 5.000	20J4209
AB48044	MICROCYSTINS ADDA 54	1.375 Abs [1.3735] {0.2 C	0.071 µg/L [0.072]			0.300 - 5.000	20J4209
AB48045	MICROCYSTINS ADDA 54	1.491 Abs	0.016 µg/L	Low, 98.221 %Abs		0.300 - 5.000	20J4209
AB48045	MICROCYSTINS ADDA 54	1.492 Abs [1.4915] {0.0 C	0.015 µg/L [0.015]			0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.813 Abs	0.580 µg/L	53.557 %Abs		0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.797 Abs [0.8050] {1.4 C	0.608 µg/L [0.594]	52.503 %Abs [53.0		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.485 Abs	0.019 µg/L	Low, 97.826 %Abs		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.450 Abs [1.4675] {1.7 C	0.035 µg/L [0.027]			0.300 - 5.000	20J4209

Note

Signature _____



Charles Hostetter 7/22/2021

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests

* Generated by software version (6.4.1.1139/1085/1.00/0.95) 7/22/2021 11:49:06 AM

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: 20J4209

Assay Calibration

Current Calibration Status: "

Expired

"

Name	Absorbance	Concentration	Interpretation	Position
7/20/2021 6:34:46 PM				
MCT Std 0	1.537 Abs	0.000 µg/L	R ² =0.99769, 101.252 %Abs	RK1:23->A01@2
MCT Std 0	1.499 Abs [1.5180] {1.8 CV}	0.012 µg/L [0.006] {141.4 CV}	R ² =0.99769, 98.748 %Abs	RK1:23->B01@2
MCT Std 1	1.275 Abs	0.125 µg/L	R ² =0.99769, 83.992 %Abs	RK1:24->C01@2
MCT Std 1	1.240 Abs [1.2575] {2.0 CV}	0.146 µg/L [0.135] {11.0 CV}	R ² =0.99769, 81.686 %Abs	RK1:24->D01@2
MCT Std 2	0.916 Abs	0.429 µg/L	R ² =0.99769, 60.343 %Abs	RK1:25->E01@2
MCT Std 2	0.897 Abs [0.9065] {1.5 CV}	0.453 µg/L [0.441] {3.8 CV}	R ² =0.99769, 59.091 %Abs	RK1:25->F01@3
MCT Std 3	0.657 Abs	0.943 µg/L	R ² =0.99769, 43.281 %Abs	RK1:26->G01@3
MCT Std 3	0.646 Abs [0.6515] {1.2 CV}	0.979 µg/L [0.961] {2.6 CV}	R ² =0.99769, 42.556 %Abs	RK1:26->H01@3
MCT Std 4	0.505 Abs	1.690 µg/L	R ² =0.99769, 33.267 %Abs	RK1:27->A02@2
MCT Std 4	0.474 Abs [0.4895] {4.5 CV}	1.958 µg/L [1.824] {10.4 CV}	R ² =0.99769, 31.225 %Abs	RK1:27->B02@2
MCT Std 5	0.340 Abs	> 5.000 µg/L	22.398 %Abs	RK1:28->C02@2
MCT Std 5	0.312 Abs [0.3260] {6.1 CV}	> 5.000 µg/L	20.553 %Abs	RK1:28->D02@2

7/20/2021 6:34:46 PM				
MCT 546 LRB 1	1.431 Abs	0.044 µg/L	94.269 %Abs	RK1:29->F02@3
MCT 546 LRB 1	1.463 Abs [1.4470] {1.6 CV}	0.029 µg/L [0.036] {29.1 CV}	96.377 %Abs [95.323 %Abs]	RK1:29->E02@2
MCT 546 Low-CV	1.034 Abs	0.301 µg/L	68.116 %Abs	RK1:30->G02@3
MCT 546 Low-CV	1.007 Abs [1.0205] {1.9 CV}	0.327 µg/L [0.314] {5.9 CV}	66.337 %Abs [67.227 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.820 Abs	0.568 µg/L	54.018 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.787 Abs [0.8035] {2.9 CV}	0.627 µg/L [0.597] {7.0 CV}	51.845 %Abs [52.931 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.5180	0.0060		
MCT Std 0 [SD]	0.0269	0.0085		
MCT Std 0 [%CV]	1.7701	141.4214		
MCT Std 1 [MEAN]	1.2575	0.1355		
MCT Std 1 [SD]	0.0247	0.0148		
MCT Std 1 [%CV]	1.9681	10.9588		
MCT Std 1 [%DIFF]		-9.6667		
MCT Std 2 [MEAN]	0.9065	0.4410		
MCT Std 2 [SD]	0.0134	0.0170		
MCT Std 2 [%CV]	1.4821	3.8482		
MCT Std 2 [%DIFF]		10.2500		
MCT Std 3 [MEAN]	0.6515	0.9610		
MCT Std 3 [SD]	0.0078	0.0255		
MCT Std 3 [%CV]	1.1939	2.6489		
MCT Std 3 [%DIFF]		-3.9000		
MCT Std 4 [MEAN]	0.4895	1.8240		

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0219	0.1895		
MCT Std 4 [%CV]	4.4781	10.3895		
MCT Std 4 [%DIFF]		-8.8000		
MCT Std 5 [MEAN]	0.3260			
MCT Std 5 [SD]	0.0198			
MCT Std 5 [%CV]	6.0733			
MCT 546 LRB 1 [MEAN]	1.4470	0.0365		
MCT 546 LRB 1 [SD]	0.0226	0.0106		
MCT 546 LRB 1 [%CV]	1.5638	29.0592		
MCT 546 Low-CV [MEAN]	1.0205	0.3140		
MCT 546 Low-CV [SD]	0.0191	0.0184		
MCT 546 Low-CV [%CV]	1.8708	5.8550		
MCT 546 LFB 1 [MEAN]	0.8035	0.5975		
MCT 546 LFB 1 [SD]	0.0233	0.0417		
MCT 546 LFB 1 [%CV]	2.9041	6.9823		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5239
 B = 1.0717
 C = 0.46878
 D = 0.24715
 R2 coef = 0.99769
 50% = 0.682

