



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

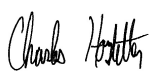
Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41517	Potato Creek SP - Worster Lake Beach	8/26/2024	8/28/2024	< 0.30
AC41518	Chain O'Lakes SP - Sand Lake Beach	8/26/2024	8/28/2024	< 0.30
AC41519	Mississinewa Lake - Miami SRA Beach	8/26/2024	8/28/2024	< 0.30
AC41520	Salamonie Lake - Lost Bridge West SRA Beach	8/26/2024	8/28/2024	< 0.30
AC41521	Chain O'Lakes SP - Sand Lake Beach (Field Duplicate)	8/26/2024	8/28/2024	< 0.30
AC41522	Field Blank	8/26/2024	8/28/2024	< 0.30
AC41523	Ferdinand State Forest - Ferdinand Lake Beach	8/26/2024	8/28/2024	< 0.30
AC41524	Lincoln SP - Lake Lincoln Beach	8/26/2024	8/28/2024	< 0.30
AC41525	Patoka Lake - Newton Stewart SRA	8/26/2024	8/28/2024	< 0.30

Test Information

Request: 8/28/2024 2:22:04 PM
Date: 8/28/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.134 Abs	0.072 µg/L	R^2=0.99704, 95.61		0.000	Kit:240446
MCT Std 0	MICROCYSTINS ADDA 54	1.238 Abs [1.1860] {6.2 C	0.000 µg/L [0.036]	R^2=0.99704, 104.3		0.000	Kit:240446
MCT Std 1	MICROCYSTINS ADDA 54	1.073 Abs	0.124 µg/L	R^2=0.99704, 90.47		0.150	Kit:240446
MCT Std 1	MICROCYSTINS ADDA 54	1.055 Abs [1.0640] {1.2 C	0.139 µg/L [0.132]	R^2=0.99704, 88.95		0.150	Kit:240446
MCT Std 2	MICROCYSTINS ADDA 54	0.762 Abs	0.424 µg/L	R^2=0.99704, 64.25		0.400	Kit:240446
MCT Std 2	MICROCYSTINS ADDA 54	0.757 Abs [0.7595] {0.5 C	0.430 µg/L [0.427]	R^2=0.99704, 63.82		0.400	Kit:240446
MCT Std 3	MICROCYSTINS ADDA 54	0.483 Abs	1.024 µg/L	R^2=0.99704, 40.72		1.000	Kit:240446
MCT Std 3	MICROCYSTINS ADDA 54	0.494 Abs [0.4885] {1.6 C	0.983 µg/L [1.004]	R^2=0.99704, 41.65		1.000	Kit:240446
MCT Std 4	MICROCYSTINS ADDA 54	0.367 Abs	1.757 µg/L	R^2=0.99704, 30.94		2.000	Kit:240446
MCT Std 4	MICROCYSTINS ADDA 54	0.381 Abs [0.3740] {2.6 C	1.621 µg/L [1.689]	R^2=0.99704, 32.12		2.000	Kit:240446
MCT Std 5	MICROCYSTINS ADDA 54	0.248 Abs	> 5.000 µg/L	20.911 %Abs		5.000	Kit:240446
MCT Std 5	MICROCYSTINS ADDA 54	0.241 Abs [0.2445] {2.0 C	> 5.000 µg/L	20.320 %Abs		5.000	Kit:240446
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.187 Abs	0.017 µg/L	100.000 %Abs			Kit:240446
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.163 Abs [1.1750] {1.4 C	0.045 µg/L [0.031]	98.061 %Abs [99.0			Kit:240446
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.819 Abs	0.357 µg/L	69.056 %Abs			Kit:240446
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.837 Abs [0.8280] {1.5 C	0.337 µg/L [0.347]	70.573 %Abs [69.8			Kit:240446
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.659 Abs	0.575 µg/L	55.565 %Abs			Kit:240446
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.682 Abs [0.6705] {2.4 C	0.537 µg/L [0.556]	57.504 %Abs [56.5			Kit:240446

Note

Signature 

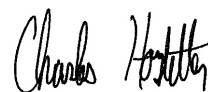
Test Information

Request: 8/28/2024 2:48:11 PM
Date: 8/28/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC41517	MICROCYSTINS ADDA 54	1.156 Abs	0.052 µg/L	Low, 97.470 %Abs		0.300 - 5.000	Kit:24044(
AC41517	MICROCYSTINS ADDA 54	1.166 Abs [1.1610] {0.6 C	0.042 µg/L [0.047]	Low, 98.314 %Abs		0.300 - 5.000	Kit:24044(
AC41517MS	MICROCYSTINS ADDA 54	0.644 Abs	0.602 µg/L	54.300 %Abs		0.300 - 5.000	Kit:24044(
AC41517MS	MICROCYSTINS ADDA 54	0.631 Abs [0.6375] {1.4 C	0.626 µg/L [0.614]	53.204 %Abs [53.7		0.300 - 5.000	Kit:24044(
AC41517MSD	MICROCYSTINS ADDA 54	0.612 Abs	0.663 µg/L	51.602 %Abs		0.300 - 5.000	Kit:24044(
AC41517MSD	MICROCYSTINS ADDA 54	0.629 Abs [0.6205] {1.9 C	0.630 µg/L [0.647]	53.035 %Abs [52.3		0.300 - 5.000	Kit:24044(
AC41518	MICROCYSTINS ADDA 54	1.079 Abs	0.119 µg/L	Low, 90.978 %Abs		0.300 - 5.000	Kit:24044(
AC41518	MICROCYSTINS ADDA 54	1.111 Abs [1.0950] {2.1 C	0.092 µg/L [0.106]	Low, 93.676 %Abs		0.300 - 5.000	Kit:24044(
AC41519	MICROCYSTINS ADDA 54	1.082 Abs	0.116 µg/L	Low, 91.231 %Abs		0.300 - 5.000	Kit:24044(
AC41519	MICROCYSTINS ADDA 54	1.118 Abs [1.1000] {2.3 C	0.086 µg/L [0.101]	Low, 94.266 %Abs		0.300 - 5.000	Kit:24044(
AC41520	MICROCYSTINS ADDA 54	1.070 Abs	0.126 µg/L	Low, 90.219 %Abs		0.300 - 5.000	Kit:24044(
AC41520	MICROCYSTINS ADDA 54	1.049 Abs [1.0595] {1.4 C	0.144 µg/L [0.135]	Low, 88.449 %Abs		0.300 - 5.000	Kit:24044(
AC41521	MICROCYSTINS ADDA 54	1.064 Abs	0.131 µg/L	Low, 89.713 %Abs		0.300 - 5.000	Kit:24044(
AC41521	MICROCYSTINS ADDA 54	1.048 Abs [1.0560] {1.1 C	0.145 µg/L [0.138]	Low, 88.364 %Abs		0.300 - 5.000	Kit:24044(
AC41522	MICROCYSTINS ADDA 54	1.190 Abs	0.012 µg/L	Low, 100.337 %Abs		0.300 - 5.000	Kit:24044(
AC41522	MICROCYSTINS ADDA 54	1.193 Abs [1.1915] {0.2 C	0.007 µg/L [0.010]	Low, 100.590 %Abs		0.300 - 5.000	Kit:24044(
AC41523	MICROCYSTINS ADDA 54	0.935 Abs	0.241 µg/L	Low, 78.836 %Abs		0.300 - 5.000	Kit:24044(
AC41523	MICROCYSTINS ADDA 54	0.888 Abs [0.9115] {3.6 C	0.285 µg/L [0.263]	Low, 74.874 %Abs		0.300 - 5.000	Kit:24044(
AC41524	MICROCYSTINS ADDA 54	1.087 Abs	0.112 µg/L	Low, 91.653 %Abs		0.300 - 5.000	Kit:24044(
AC41524	MICROCYSTINS ADDA 54	1.060 Abs [1.0735] {1.8 C	0.135 µg/L [0.124]	Low, 89.376 %Abs		0.300 - 5.000	Kit:24044(
AC41525	MICROCYSTINS ADDA 54	1.089 Abs	0.111 µg/L	Low, 91.821 %Abs		0.300 - 5.000	Kit:24044(
AC41525	MICROCYSTINS ADDA 54	1.052 Abs [1.0705] {2.4 C	0.141 µg/L [0.126]	Low, 88.702 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.703 Abs	0.505 µg/L	59.275 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.707 Abs [0.7050] {0.4 C	0.499 µg/L [0.502]	59.612 %Abs [59.4		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.211 Abs	0.000 µg/L	Low, 102.108 %Abs		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.188 Abs [1.1995] {1.4 C	0.015 µg/L [0.008]	Low, 100.169 %Abs		0.300 - 5.000	Kit:24044(

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: Kit:2404401378

Assay Calibration

Current Calibration Status: " "

Name	Absorbance	Concentration	Interpretation	Position	
8/28/2024 2:22:04 PM					
MCT Std 0	1.134 Abs	0.072 µg/L	R^2=0.99704, 95.616 %Abs	RK1:23->A01@2	
MCT Std 0	1.238 Abs [1.1860] {6.2 CV}	0.000 µg/L [0.036] {141.4 CV}	R^2=0.99704, 104.384 %Abs	RK1:23->B01@2	
MCT Std 1	1.073 Abs	0.124 µg/L	R^2=0.99704, 90.472 %Abs	RK1:24->C01@2	
MCT Std 1	1.055 Abs [1.0640] {1.2 CV}	0.139 µg/L [0.132] {8.1 CV}	R^2=0.99704, 88.954 %Abs	RK1:24->D01@2	
MCT Std 2	0.762 Abs	0.424 µg/L	R^2=0.99704, 64.250 %Abs	RK1:25->E01@2	
MCT Std 2	0.757 Abs [0.7595] {0.5 CV}	0.430 µg/L [0.427] {1.0 CV}	R^2=0.99704, 63.828 %Abs	RK1:25->F01@3	
MCT Std 3	0.483 Abs	1.024 µg/L	R^2=0.99704, 40.725 %Abs	RK1:26->G01@3	
MCT Std 3	0.494 Abs [0.4885] {1.6 CV}	0.983 µg/L [1.004] {2.9 CV}	R^2=0.99704, 41.653 %Abs	RK1:26->H01@3	
MCT Std 4	0.367 Abs	1.757 µg/L	R^2=0.99704, 30.944 %Abs	RK1:27->A02@2	
MCT Std 4	0.381 Abs [0.3740] {2.6 CV}	1.621 µg/L [1.689] {5.7 CV}	R^2=0.99704, 32.125 %Abs	RK1:27->B02@2	
MCT Std 5	0.248 Abs	> 5.000 µg/L	20.911 %Abs	RK1:28->C02@2	
MCT Std 5	0.241 Abs [0.2445] {2.0 CV}	> 5.000 µg/L	20.320 %Abs	RK1:28->D02@2	
*****	*****	*****	*****	*****	*****
8/28/2024 2:22:04 PM					
MCT 546 LRB 1	1.187 Abs	0.017 µg/L	100.000 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.163 Abs [1.1750] {1.4 CV}	0.045 µg/L [0.031] {63.9 CV}	98.061 %Abs [99.073 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.819 Abs	0.357 µg/L	69.056 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.837 Abs [0.8280] {1.5 CV}	0.337 µg/L [0.347] {4.1 CV}	70.573 %Abs [69.815 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.659 Abs	0.575 µg/L	55.565 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.682 Abs [0.6705] {2.4 CV}	0.537 µg/L [0.556] {4.8 CV}	57.504 %Abs [56.535 %Abs]	RK1:31->B03@2	
*****	*****	*****	*****	*****	*****
Statistic					
MCT Std 0 [MEAN]	1.1860	0.0360			
MCT Std 0 [SD]	0.0735	0.0509			
MCT Std 0 [%CV]	6.2006	141.4214			
MCT Std 1 [MEAN]	1.0640	0.1315			
MCT Std 1 [SD]	0.0127	0.0106			
MCT Std 1 [%CV]	1.1962	8.0659			
MCT Std 1 [%DIFF]		-12.3333			
MCT Std 2 [MEAN]	0.7595	0.4270			
MCT Std 2 [SD]	0.0035	0.0042			
MCT Std 2 [%CV]	0.4655	0.9936			
MCT Std 2 [%DIFF]		6.7500			
MCT Std 3 [MEAN]	0.4885	1.0035			
MCT Std 3 [SD]	0.0078	0.0290			
MCT Std 3 [%CV]	1.5923	2.8890			
MCT Std 3 [%DIFF]		0.3500			
MCT Std 4 [MEAN]	0.3740	1.6890			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0099	0.0962			
MCT Std 4 [%CV]	2.6469	5.6937			
MCT Std 4 [%DIFF]		-15.5500			
MCT Std 5 [MEAN]	0.2445				
MCT Std 5 [SD]	0.0049				
MCT Std 5 [%CV]	2.0244				
MCT 546 LRB 1 [MEAN]	1.1750	0.0310			
MCT 546 LRB 1 [SD]	0.0170	0.0198			
MCT 546 LRB 1 [%CV]	1.4443	63.8677			
MCT 546 Low-CV [MEAN]	0.8280	0.3470			
MCT 546 Low-CV [SD]	0.0127	0.0141			
MCT 546 Low-CV [%CV]	1.5372	4.0755			
MCT 546 LFB 1 [MEAN]	0.6705	0.5560			
MCT 546 LFB 1 [SD]	0.0163	0.0269			
MCT 546 LFB 1 [%CV]	2.4256	4.8327			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.1954
B = 1.4009
C = 0.49230
D = 0.22765
R2 coef = 0.99704
50% = 0.703

