



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41107	Potato Creek SP - Worster Lake Beach	7/29/2024	8/1/2024	< 0.30
AC41108	Mississinewa Lake - Miami SRA Beach	7/29/2024	8/1/2024	< 0.30
AC41109	Salamonie Lake - Lost Bridge West SRA Beach	7/29/2024	8/1/2024	< 0.30
AC41110	Potato Creek SP - Worster Lake Beach (Field Duplicate)	7/29/2024	8/1/2024	< 0.30
AC41111	Field Blank	7/29/2024	8/1/2024	< 0.30
AC41112	Patoka Lake - Newton Stewart SRA Beach	7/29/2024	8/1/2024	< 0.30

Test Information

Request: 8/1/2024 3:21:48 PM
Date: 8/1/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.258 Abs	0.000 µg/L	R^2=0.99495, 107.1		0.000	Kit:24044(
MCT Std 0	MICROCYSTINS ADDA 54	1.090 Abs [1.1740] {10.1	0.111 µg/L [0.056]	R^2=0.99495, 92.84		0.000	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	1.070 Abs	0.130 µg/L	R^2=0.99495, 91.14		0.150	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	1.062 Abs [1.0660] {0.5 C	0.137 µg/L [0.134]	R^2=0.99495, 90.46		0.150	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.791 Abs	0.410 µg/L	R^2=0.99495, 67.37		0.400	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.785 Abs [0.7880] {0.5 C	0.417 µg/L [0.414]	R^2=0.99495, 66.86		0.400	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.473 Abs	1.136 µg/L	R^2=0.99495, 40.25		1.000	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.503 Abs [0.4880] {4.3 C	1.012 µg/L [1.074]	R^2=0.99495, 42.84		1.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.410 Abs	1.511 µg/L	R^2=0.99495, 34.92		2.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.403 Abs [0.4065] {1.2 C	1.567 µg/L [1.539]	R^2=0.99495, 34.32		2.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.256 Abs	> 5.000 µg/L	21.806 %Abs		5.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.253 Abs [0.2545] {0.8 C	> 5.000 µg/L	21.550 %Abs		5.000	Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.230 Abs	0.000 µg/L	104.770 %Abs			Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.216 Abs [1.2230] {0.8 C	0.000 µg/L [0.000]	103.578 %Abs [104			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.835 Abs	0.357 µg/L	71.124 %Abs			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.816 Abs [0.8255] {1.6 C	0.379 µg/L [0.368]	69.506 %Abs [70.3			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.744 Abs	0.472 µg/L	63.373 %Abs			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.761 Abs [0.7525] {1.6 C	0.449 µg/L [0.461]	64.821 %Abs [64.0			Kit:24044(

Note

* 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 (6.4.1.1171/1085/1.00/0.95) 8/1/2024 3:43:35 PM

Signature Charles Hostetter

Charles Hostetter 8/1/24

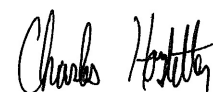
Test Information

Request: 8/1/2024 3:23:20 PM
Date: 8/1/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC41107	MICROCYSTINS ADDA 54	1.209 Abs	0.000 µg/L	Low, 102.981 %Abs		0.300 - 5.000	Kit:240446
AC41107	MICROCYSTINS ADDA 54	1.185 Abs [1.1970] {1.4 C	0.000 µg/L [0.000]	Low, 100.937 %Abs		0.300 - 5.000	Kit:240446
AC41108	MICROCYSTINS ADDA 54	1.100 Abs	0.102 µg/L	Low, 93.697 %Abs		0.300 - 5.000	Kit:240446
AC41108	MICROCYSTINS ADDA 54	1.072 Abs [1.0860] {1.8 C	0.128 µg/L [0.115]	Low, 91.312 %Abs		0.300 - 5.000	Kit:240446
AC41109	MICROCYSTINS ADDA 54	0.984 Abs	0.207 µg/L	Low, 83.816 %Abs		0.300 - 5.000	Kit:240446
AC41109	MICROCYSTINS ADDA 54	0.988 Abs [0.9860] {0.3 C	0.204 µg/L [0.206]	Low, 84.157 %Abs		0.300 - 5.000	Kit:240446
AC41109MS	MICROCYSTINS ADDA 54	0.637 Abs	0.649 µg/L	54.259 %Abs		0.300 - 5.000	Kit:240446
AC41109MS	MICROCYSTINS ADDA 54	0.675 Abs [0.6560] {4.1 C	0.579 µg/L [0.614]	57.496 %Abs [55.8		0.300 - 5.000	Kit:240446
AC41109MSD	MICROCYSTINS ADDA 54	0.669 Abs	0.590 µg/L	56.985 %Abs		0.300 - 5.000	Kit:240446
AC41109MSD	MICROCYSTINS ADDA 54	0.658 Abs [0.6635] {1.2 C	0.609 µg/L [0.600]	56.048 %Abs [56.5		0.300 - 5.000	Kit:240446
AC41110	MICROCYSTINS ADDA 54	1.204 Abs	0.000 µg/L	Low, 102.555 %Abs		0.300 - 5.000	Kit:240446
AC41110	MICROCYSTINS ADDA 54	1.192 Abs [1.1980] {0.7 C	0.000 µg/L [0.000]	Low, 101.533 %Abs		0.300 - 5.000	Kit:240446
AC41111	MICROCYSTINS ADDA 54	1.105 Abs	0.097 µg/L	Low, 94.123 %Abs		0.300 - 5.000	Kit:240446
AC41111	MICROCYSTINS ADDA 54	1.082 Abs [1.0935] {1.5 C	0.119 µg/L [0.108]	Low, 92.164 %Abs		0.300 - 5.000	Kit:240446
AC41112	MICROCYSTINS ADDA 54	1.243 Abs	0.000 µg/L	Low, 105.877 %Abs		0.300 - 5.000	Kit:240446
AC41112	MICROCYSTINS ADDA 54	1.252 Abs [1.2475] {0.5 C	0.000 µg/L [0.000]	Low, 106.644 %Abs		0.300 - 5.000	Kit:240446
LFB 2	MICROCYSTINS ADDA 54	0.736 Abs	0.483 µg/L	62.692 %Abs		0.300 - 5.000	Kit:240446
LFB 2	MICROCYSTINS ADDA 54	0.697 Abs [0.7165] {3.8 C	0.542 µg/L [0.513]	59.370 %Abs [61.0		0.300 - 5.000	Kit:240446
LRB 2	MICROCYSTINS ADDA 54	1.121 Abs	0.082 µg/L	Low, 95.486 %Abs		0.300 - 5.000	Kit:240446
LRB 2	MICROCYSTINS ADDA 54	1.114 Abs [1.1175] {0.4 C	0.089 µg/L [0.086]	Low, 94.889 %Abs		0.300 - 5.000	Kit:240446

Note

Signature



Charles Hostetter 8/1/24

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	
8/1/2024 3:21:48 PM					
MCT Std 0	1.258 Abs	0.000 µg/L	R^2=0.99495, 107.155 %Abs	RK1:23->A01@2	
MCT Std 0	1.090 Abs [1.1740] {10.1 CV}	0.111 µg/L [0.056] {141.4 CV}	R^2=0.99495, 92.845 %Abs	RK1:23->B01@2	
MCT Std 1	1.070 Abs	0.130 µg/L	R^2=0.99495, 91.141 %Abs	RK1:24->C01@2	
MCT Std 1	1.062 Abs [1.0660] {0.5 CV}	0.137 µg/L [0.134] {3.7 CV}	R^2=0.99495, 90.460 %Abs	RK1:24->D01@2	
MCT Std 2	0.791 Abs	0.410 µg/L	R^2=0.99495, 67.376 %Abs	RK1:25->E01@2	
MCT Std 2	0.785 Abs [0.7880] {0.5 CV}	0.417 µg/L [0.414] {1.2 CV}	R^2=0.99495, 66.865 %Abs	RK1:25->F01@3	
MCT Std 3	0.473 Abs	1.136 µg/L	R^2=0.99495, 40.290 %Abs	RK1:26->G01@3	
MCT Std 3	0.503 Abs [0.4880] {4.3 CV}	1.012 µg/L [1.074] {8.2 CV}	R^2=0.99495, 42.845 %Abs	RK1:26->H01@3	
MCT Std 4	0.410 Abs	1.511 µg/L	R^2=0.99495, 34.923 %Abs	RK1:27->A02@2	
MCT Std 4	0.403 Abs [0.4065] {1.2 CV}	1.567 µg/L [1.539] {2.6 CV}	R^2=0.99495, 34.327 %Abs	RK1:27->B02@2	
MCT Std 5	0.256 Abs	> 5.000 µg/L	21.806 %Abs	RK1:28->C02@2	
MCT Std 5	0.253 Abs [0.2545] {0.8 CV}	> 5.000 µg/L	21.550 %Abs	RK1:28->D02@2	
*****	*****	*****	*****	*****	*****
8/1/2024 3:21:48 PM					
MCT 546 LRB 1	1.230 Abs	0.000 µg/L	104.770 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.216 Abs [1.2230] {0.8 CV}	0.000 µg/L [0.000]	103.578 %Abs [104.174 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.835 Abs	0.357 µg/L	71.124 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.816 Abs [0.8255] {1.6 CV}	0.379 µg/L [0.368] {4.2 CV}	69.506 %Abs [70.315 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.744 Abs	0.472 µg/L	63.373 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.761 Abs [0.7525] {1.6 CV}	0.449 µg/L [0.461] {3.5 CV}	64.821 %Abs [64.097 %Abs]	RK1:31->B03@2	
*****	*****	*****	*****	*****	*****
Statistic					
MCT Std 0 [MEAN]	1.1740	0.0555			
MCT Std 0 [SD]	0.1188	0.0785			
MCT Std 0 [%CV]	10.1187	141.4214			
MCT Std 1 [MEAN]	1.0660	0.1335			
MCT Std 1 [SD]	0.0057	0.0049			
MCT Std 1 [%CV]	0.5307	3.7077			
MCT Std 1 [%DIFF]		-11.0000			
MCT Std 2 [MEAN]	0.7880	0.4135			
MCT Std 2 [SD]	0.0042	0.0049			
MCT Std 2 [%CV]	0.5384	1.1970			
MCT Std 2 [%DIFF]		3.3750			
MCT Std 3 [MEAN]	0.4880	1.0740			
MCT Std 3 [SD]	0.0212	0.0877			
MCT Std 3 [%CV]	4.3470	8.1640			
MCT Std 3 [%DIFF]		7.4000			
MCT Std 4 [MEAN]	0.4065	1.5390			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0049	0.0396			
MCT Std 4 [%CV]	1.2177	2.5730			
MCT Std 4 [%DIFF]		-23.0500			
MCT Std 5 [MEAN]	0.2545				
MCT Std 5 [SD]	0.0021				
MCT Std 5 [%CV]	0.8335				
MCT 546 LRB 1 [MEAN]	1.2230	0.0000			
MCT 546 LRB 1 [SD]	0.0099	0.0000			
MCT 546 LRB 1 [%CV]	0.8094	0.0000			
MCT 546 Low-CV [MEAN]	0.8255	0.3680			
MCT 546 Low-CV [SD]	0.0134	0.0156			
MCT 546 Low-CV [%CV]	1.6275	4.2273			
MCT 546 LFB 1 [MEAN]	0.7525	0.4605			
MCT 546 LFB 1 [SD]	0.0120	0.0163			
MCT 546 LFB 1 [%CV]	1.5974	3.5317			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.1830
B = 1.4409
C = 0.51487
D = 0.24610
R2 coef = 0.99495
50% = 0.759

