



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41502	Cecil M. Harden Lake - Raccoon Lake SRA Beach	8/19/2024	8/22/2024	< 0.30
AC41503	Cagles Mill Lake - Lieber SRA Beach	8/19/2024	8/22/2024	< 0.30
AC41504	Monroe Lake - Fairfax SRA Beach	8/19/2024	8/22/2024	< 0.30
AC41505	Monroe Lake - Paynetown SRA Beach	8/19/2024	8/22/2024	< 0.30
AC41506	Starve Hollow SRA - Starve Hollow Lake Beach	8/19/2024	8/22/2024	< 0.30
AC41507	Hardy Lake SRA - Hardy Lake SRA Beach	8/20/2024	8/22/2024	< 0.30
AC41508	Whitewater Memorial SP - Whitewater Lake Beach	8/20/2024	8/22/2024	< 0.30
AC41509	Brookville Lake - Quakertown SRA Beach	8/20/2024	8/22/2024	< 0.30
AC41510	Brookville Lake - Mounds SRA Beach	8/20/2024	8/22/2024	< 0.30
AC41511	Hardy Lake SRA - Hardy Lake SRA Beach (Field Duplicate)	8/20/2024	8/22/2024	< 0.30
AC41512	Field Blank	8/20/2024	8/22/2024	< 0.30
AC41513	Ft. Ben Harrison SP Dog Lake	8/20/2024	8/22/2024	< 0.30

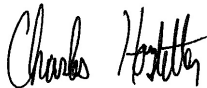
Test Information

Request: 8/22/2024 12:11:17 PM

Date: 8/22/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.120 Abs	0.018 µg/L	R^2=0.99835, 98.07		0.000	Kit:24044(
MCT Std 0	MICROCYSTINS ADDA 54	1.164 Abs [1.1420] {2.7 C	0.000 µg/L [0.009]	R^2=0.99835, 101.5		0.000	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	0.984 Abs	0.118 µg/L	R^2=0.99835, 86.16		0.150	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	0.885 Abs [0.9345] {7.5 C	0.201 µg/L [0.160]	R^2=0.99835, 77.45		0.150	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.735 Abs	0.366 µg/L	R^2=0.99835, 64.36		0.400	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.718 Abs [0.7265] {1.7 C	0.389 µg/L [0.378]	R^2=0.99835, 62.87		0.400	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.446 Abs	1.099 µg/L	R^2=0.99835, 39.05		1.000	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.446 Abs [0.4460] {0.0 C	1.099 µg/L [1.099]	R^2=0.99835, 39.05		1.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.346 Abs	1.876 µg/L	R^2=0.99835, 30.25		2.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.356 Abs [0.3510] {2.0 C	1.760 µg/L [1.818]	R^2=0.99835, 31.17		2.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.243 Abs	> 5.000 µg/L	21.278 %Abs		5.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.240 Abs [0.2415] {0.9 C	> 5.000 µg/L	21.016 %Abs		5.000	Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.143 Abs	0.000 µg/L	100.000 %Abs			Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.137 Abs [1.1400] {0.4 C	0.004 µg/L [0.002]	99.562 %Abs [99.8			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.798 Abs	0.289 µg/L	69.877 %Abs			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.774 Abs [0.7860] {2.2 C	0.317 µg/L [0.303]	67.776 %Abs [68.8			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.652 Abs	0.493 µg/L	57.093 %Abs			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.662 Abs [0.6570] {1.1 C	0.476 µg/L [0.485]	57.968 %Abs [57.5			Kit:24044(

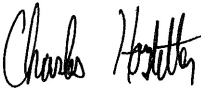
Note



Signature

Test Information							
Request: 8/22/2024 12:12:34 PM							
Date: 8/22/2024							
Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC41502	MICROCYSTINS ADDA 54	1.059 Abs	0.063 µg/L	Low, 92.732 %Abs		0.300 - 5.000	Kit:24044(
AC41502	MICROCYSTINS ADDA 54	1.093 Abs [1.0760] {2.2 C	0.038 µg/L [0.051]	Low, 95.709 %Abs		0.300 - 5.000	Kit:24044(
AC41503	MICROCYSTINS ADDA 54	1.046 Abs	0.072 µg/L	Low, 91.594 %Abs		0.300 - 5.000	Kit:24044(
AC41503	MICROCYSTINS ADDA 54	1.027 Abs [1.0365] {1.3 C	0.086 µg/L [0.079]	Low, 89.930 %Abs		0.300 - 5.000	Kit:24044(
AC41504	MICROCYSTINS ADDA 54	1.025 Abs	0.087 µg/L	Low, 89.755 %Abs		0.300 - 5.000	Kit:24044(
AC41504	MICROCYSTINS ADDA 54	1.005 Abs [1.0150] {1.4 C	0.102 µg/L [0.095]	Low, 88.004 %Abs		0.300 - 5.000	Kit:24044(
AC41505	MICROCYSTINS ADDA 54	1.040 Abs	0.076 µg/L	Low, 91.068 %Abs		0.300 - 5.000	Kit:24044(
AC41505	MICROCYSTINS ADDA 54	1.081 Abs [1.0605] {2.7 C	0.047 µg/L [0.062]	Low, 94.658 %Abs		0.300 - 5.000	Kit:24044(
AC41506	MICROCYSTINS ADDA 54	1.147 Abs	0.000 µg/L	Low, 100.438 %Abs		0.300 - 5.000	Kit:24044(
AC41506	MICROCYSTINS ADDA 54	1.112 Abs [1.1295] {2.2 C	0.024 µg/L [0.012]	Low, 97.373 %Abs		0.300 - 5.000	Kit:24044(
AC41507	MICROCYSTINS ADDA 54	0.949 Abs	0.146 µg/L	Low, 83.100 %Abs		0.300 - 5.000	Kit:24044(
AC41507	MICROCYSTINS ADDA 54	0.919 Abs [0.9340] {2.3 C	0.171 µg/L [0.159]	Low, 80.473 %Abs		0.300 - 5.000	Kit:24044(
AC41508	MICROCYSTINS ADDA 54	0.982 Abs	0.120 µg/L	Low, 85.989 %Abs		0.300 - 5.000	Kit:24044(
AC41508	MICROCYSTINS ADDA 54	0.926 Abs [0.9540] {4.2 C	0.165 µg/L [0.143]	Low, 81.086 %Abs		0.300 - 5.000	Kit:24044(
AC41508MS	MICROCYSTINS ADDA 54	0.559 Abs	0.693 µg/L	48.949 %Abs		0.300 - 5.000	Kit:24044(
AC41508MS	MICROCYSTINS ADDA 54	0.589 Abs [0.5740] {3.7 C	0.620 µg/L [0.657]	51.576 %Abs [50.2		0.300 - 5.000	Kit:24044(
AC41508MSD	MICROCYSTINS ADDA 54	0.583 Abs	0.633 µg/L	51.051 %Abs		0.300 - 5.000	Kit:24044(
AC41508MSD	MICROCYSTINS ADDA 54	0.605 Abs [0.5940] {2.6 C	0.584 µg/L [0.609]	52.977 %Abs [52.0		0.300 - 5.000	Kit:24044(
AC41509	MICROCYSTINS ADDA 54	1.062 Abs	0.060 µg/L	Low, 92.995 %Abs		0.300 - 5.000	Kit:24044(
AC41509	MICROCYSTINS ADDA 54	1.079 Abs [1.0705] {1.1 C	0.048 µg/L [0.054]	Low, 94.483 %Abs		0.300 - 5.000	Kit:24044(
AC41510	MICROCYSTINS ADDA 54	1.038 Abs	0.078 µg/L	Low, 90.893 %Abs		0.300 - 5.000	Kit:24044(
AC41510	MICROCYSTINS ADDA 54	1.026 Abs [1.0320] {0.8 C	0.087 µg/L [0.083]	Low, 89.842 %Abs		0.300 - 5.000	Kit:24044(
AC41511	MICROCYSTINS ADDA 54	0.926 Abs	0.165 µg/L	Low, 81.086 %Abs		0.300 - 5.000	Kit:24044(
AC41511	MICROCYSTINS ADDA 54	0.940 Abs [0.9330] {1.1 C	0.153 µg/L [0.159]	Low, 82.312 %Abs		0.300 - 5.000	Kit:24044(
AC41512	MICROCYSTINS ADDA 54	1.203 Abs	0.000 µg/L	Low, 105.342 %Abs		0.300 - 5.000	Kit:24044(
AC41512	MICROCYSTINS ADDA 54	1.174 Abs [1.1885] {1.7 C	0.000 µg/L [0.000]	Low, 102.802 %Abs		0.300 - 5.000	Kit:24044(
AC41513	MICROCYSTINS ADDA 54	1.149 Abs	0.000 µg/L	Low, 100.613 %Abs		0.300 - 5.000	Kit:24044(
AC41513	MICROCYSTINS ADDA 54	1.098 Abs [1.1235] {3.2 C	0.035 µg/L [0.018]	Low, 96.147 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.622 Abs	0.550 µg/L	54.466 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.626 Abs [0.6240] {0.5 C	0.542 µg/L [0.546]	54.816 %Abs [54.6		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.194 Abs	0.000 µg/L	Low, 104.553 %Abs		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.188 Abs [1.1910] {0.4 C	0.000 µg/L [0.000]	Low, 104.028 %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	
8/22/2024 12:11:17 PM					
MCT Std 0	1.120 Abs	0.018 µg/L	R^2=0.99835, 98.074 %Abs	RK1:23->A01@2	
MCT Std 0	1.164 Abs [1.1420] {2.7 CV}	0.000 µg/L [0.009] {141.4 CV}	R^2=0.99835, 101.926 %Abs	RK1:23->B01@2	
MCT Std 1	0.984 Abs	0.118 µg/L	R^2=0.99835, 86.165 %Abs	RK1:24->C01@2	
MCT Std 1	0.885 Abs [0.9345] {7.5 CV}	0.201 µg/L [0.160] {36.8 CV}	R^2=0.99835, 77.496 %Abs	RK1:24->D01@2	
MCT Std 2	0.735 Abs	0.366 µg/L	R^2=0.99835, 64.361 %Abs	RK1:25->E01@2	
MCT Std 2	0.718 Abs [0.7265] {1.7 CV}	0.389 µg/L [0.378] {4.3 CV}	R^2=0.99835, 62.872 %Abs	RK1:25->F01@3	
MCT Std 3	0.446 Abs	1.099 µg/L	R^2=0.99835, 39.054 %Abs	RK1:26->G01@3	
MCT Std 3	0.446 Abs [0.4460] {0.0 CV}	1.099 µg/L [1.099] {0.0 CV}	R^2=0.99835, 39.054 %Abs	RK1:26->H01@3	
MCT Std 4	0.346 Abs	1.876 µg/L	R^2=0.99835, 30.298 %Abs	RK1:27->A02@2	
MCT Std 4	0.356 Abs [0.3510] {2.0 CV}	1.760 µg/L [1.818] {4.5 CV}	R^2=0.99835, 31.173 %Abs	RK1:27->B02@2	
MCT Std 5	0.243 Abs	> 5.000 µg/L	21.278 %Abs	RK1:28->C02@2	
MCT Std 5	0.240 Abs [0.2415] {0.9 CV}	> 5.000 µg/L	21.016 %Abs	RK1:28->D02@2	
*****	*****	*****	*****	*****	*****
8/22/2024 12:11:17 PM					
MCT 546 LRB 1	1.143 Abs	0.000 µg/L	100.000 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.137 Abs [1.1400] {0.4 CV}	0.004 µg/L [0.002] {141.4 CV}	99.562 %Abs [99.825 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.798 Abs	0.289 µg/L	69.877 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.774 Abs [0.7860] {2.2 CV}	0.317 µg/L [0.303] {6.5 CV}	67.776 %Abs [68.827 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.652 Abs	0.493 µg/L	57.093 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.662 Abs [0.6570] {1.1 CV}	0.476 µg/L [0.485] {2.5 CV}	57.968 %Abs [57.531 %Abs]	RK1:31->B03@2	
*****	*****	*****	*****	*****	*****
Statistic					
MCT Std 0 [MEAN]	1.1420	0.0090			
MCT Std 0 [SD]	0.0311	0.0127			
MCT Std 0 [%CV]	2.7244	141.4214			
MCT Std 1 [MEAN]	0.9345	0.1595			
MCT Std 1 [SD]	0.0700	0.0587			
MCT Std 1 [%CV]	7.4910	36.7962			
MCT Std 1 [%DIFF]		6.3333			
MCT Std 2 [MEAN]	0.7265	0.3775			
MCT Std 2 [SD]	0.0120	0.0163			
MCT Std 2 [%CV]	1.6546	4.3082			
MCT Std 2 [%DIFF]		-5.6250			
MCT Std 3 [MEAN]	0.4460	1.0990			
MCT Std 3 [SD]	0.0000	0.0000			
MCT Std 3 [%CV]	0.0000	0.0000			
MCT Std 3 [%DIFF]		9.9000			
MCT Std 4 [MEAN]	0.3510	1.8180			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0071	0.0820			
MCT Std 4 [%CV]	2.0146	4.5118			
MCT Std 4 [%DIFF]		-9.1000			
MCT Std 5 [MEAN]	0.2415				
MCT Std 5 [SD]	0.0021				
MCT Std 5 [%CV]	0.8784				
MCT 546 LRB 1 [MEAN]	1.1400	0.0020			
MCT 546 LRB 1 [SD]	0.0042	0.0028			
MCT 546 LRB 1 [%CV]	0.3722	141.4214			
MCT 546 Low-CV [MEAN]	0.7860	0.3030			
MCT 546 Low-CV [SD]	0.0170	0.0198			
MCT 546 Low-CV [%CV]	2.1591	6.5343			
MCT 546 LFB 1 [MEAN]	0.6570	0.4845			
MCT 546 LFB 1 [SD]	0.0071	0.0120			
MCT 546 LFB 1 [%CV]	1.0763	2.4811			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.1400
B = 1.1756
C = 0.47140
D = 0.18942
R2 coef = 0.99835
50% = 0.662

