



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52419	Raccoon Lake SRA	8/8/2022	8/10/2022	< 0.30
AB52421	Cagles Mill Lake Beach	8/8/2022	8/10/2022	< 0.30
AB52422	Paynetown SRA	8/8/2022	8/10/2022	< 0.30
AB52423	Fairfax SRA	8/8/2022	8/10/2022	< 0.30
AB52424	Starve Hollow SRA	8/8/2022	8/10/2022	< 0.30
AB52425	Whitewater Memorial SP	8/9/2022	8/10/2022	< 0.30
AB52426	Quakertown SRA	8/9/2022	8/10/2022	< 0.30
AB52427	Mounds SRA	8/9/2022	8/10/2022	< 0.30
AB52428	Hardy Lake SRA	8/9/2022	8/10/2022	< 0.30
AB52420	Deam Lake SRA	8/9/2022	8/10/2022	< 0.30
AB52429	Hardy Lake SRA (Field Duplicate)	8/9/2022	8/10/2022	< 0.30
AB52430	Field Blank	8/9/2022	8/10/2022	< 0.30
AB52431	Ft. Ben Harrison SP Dog Lake	8/9/2022	8/10/2022	< 0.30

Test Report (by Request)

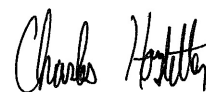
Test Information

Request: 8/10/2022 2:44:44 PM
Date: 8/10/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.379 Abs	0.000 µg/L	R^2=0.99745, 101.1			M22B127(
MCT Std 0	MICROCYSTINS ADDA 54	1.349 Abs [1.3640] {1.6 C	0.014 µg/L [0.007]	R^2=0.99745, 98.90			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.161 Abs	0.126 µg/L	R^2=0.99745, 85.11			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.118 Abs [1.1395] {2.7 C	0.154 µg/L [0.140]	R^2=0.99745, 81.96			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.858 Abs	0.388 µg/L	R^2=0.99745, 62.90			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.808 Abs [0.8330] {4.2 C	0.453 µg/L [0.421]	R^2=0.99745, 59.23			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.556 Abs	1.039 µg/L	R^2=0.99745, 40.76			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.554 Abs [0.5550] {0.3 C	1.047 µg/L [1.043]	R^2=0.99745, 40.61			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.457 Abs	1.588 µg/L	R^2=0.99745, 33.50			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.441 Abs [0.4490] {2.5 C	1.722 µg/L [1.655]	R^2=0.99745, 32.33			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.289 Abs	> 5.000 µg/L	21.188 %Abs			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.285 Abs [0.2870] {1.0 C	> 5.000 µg/L	20.894 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.332 Abs	0.024 µg/L	97.654 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.257 Abs [1.2945] {4.1 C	0.067 µg/L [0.046]	92.155 %Abs [94.9			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.843 Abs	0.407 µg/L	61.804 %Abs			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.856 Abs [0.8495] {1.1 C	0.391 µg/L [0.399]	62.757 %Abs [62.2			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.818 Abs	0.440 µg/L	59.971 %Abs			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.790 Abs [0.8040] {2.5 C	0.479 µg/L [0.460]	57.918 %Abs [58.9			M22B127(

Note

Signature




Test Information

Request: 8/10/2022 2:45:49 PM
Date: 8/10/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB52419	MICROCYSTINS ADDA 54	1.308 Abs	0.038 µg/L	Low, 95.894 %Abs		0.300 - 5.000	M22B127(
AB52419	MICROCYSTINS ADDA 54	1.280 Abs [1.2940] {1.5 C	0.054 µg/L [0.046]	Low, 93.842 %Abs		0.300 - 5.000	M22B127(
AB52421	MICROCYSTINS ADDA 54	1.195 Abs	0.104 µg/L	Low, 87.610 %Abs		0.300 - 5.000	M22B127(
AB52421	MICROCYSTINS ADDA 54	1.124 Abs [1.1595] {4.3 C	0.150 µg/L [0.127]	Low, 82.405 %Abs		0.300 - 5.000	M22B127(
AB52422	MICROCYSTINS ADDA 54	1.240 Abs	0.077 µg/L	Low, 90.909 %Abs		0.300 - 5.000	M22B127(
AB52422	MICROCYSTINS ADDA 54	1.241 Abs [1.2405] {0.1 C	0.077 µg/L [0.077]	Low, 90.982 %Abs		0.300 - 5.000	M22B127(
AB52423	MICROCYSTINS ADDA 54	1.311 Abs	0.036 µg/L	Low, 96.114 %Abs		0.300 - 5.000	M22B127(
AB52423	MICROCYSTINS ADDA 54	1.301 Abs [1.3060] {0.5 C	0.042 µg/L [0.039]	Low, 95.381 %Abs		0.300 - 5.000	M22B127(
AB52425	MICROCYSTINS ADDA 54	1.274 Abs	0.058 µg/L	Low, 93.402 %Abs		0.300 - 5.000	M22B127(
AB52425	MICROCYSTINS ADDA 54	1.272 Abs [1.2730] {0.1 C	0.059 µg/L [0.058]	Low, 93.255 %Abs		0.300 - 5.000	M22B127(
AB52428	MICROCYSTINS ADDA 54	1.219 Abs	0.090 µg/L	Low, 89.370 %Abs		0.300 - 5.000	M22B127(
AB52428	MICROCYSTINS ADDA 54	1.182 Abs [1.2005] {2.2 C	0.112 µg/L [0.101]	Low, 86.657 %Abs		0.300 - 5.000	M22B127(
AB52429	MICROCYSTINS ADDA 54	1.133 Abs	0.144 µg/L	Low, 83.065 %Abs		0.300 - 5.000	M22B127(
AB52429	MICROCYSTINS ADDA 54	1.168 Abs [1.1505] {2.2 C	0.121 µg/L [0.132]	Low, 85.631 %Abs		0.300 - 5.000	M22B127(
AB52431	MICROCYSTINS ADDA 54	1.372 Abs	0.000 µg/L	Low, 100.587 %Abs		0.300 - 5.000	M22B127(
AB52431	MICROCYSTINS ADDA 54	1.349 Abs [1.3605] {1.2 C	0.014 µg/L [0.007]	Low, 98.900 %Abs		0.300 - 5.000	M22B127(
AB52420	MICROCYSTINS ADDA 54	1.268 Abs	0.061 µg/L	Low, 92.962 %Abs		0.300 - 5.000	M22B127(
AB52420	MICROCYSTINS ADDA 54	1.238 Abs [1.2530] {1.7 C	0.078 µg/L [0.069]	Low, 90.762 %Abs		0.300 - 5.000	M22B127(
AB52424	MICROCYSTINS ADDA 54	1.217 Abs	0.091 µg/L	Low, 89.223 %Abs		0.300 - 5.000	M22B127(
AB52424	MICROCYSTINS ADDA 54	1.221 Abs [1.2190] {0.2 C	0.089 µg/L [0.090]	Low, 89.516 %Abs		0.300 - 5.000	M22B127(
AB52426	MICROCYSTINS ADDA 54	1.121 Abs	0.152 µg/L	Low, 82.185 %Abs		0.300 - 5.000	M22B127(
AB52426	MICROCYSTINS ADDA 54	1.109 Abs [1.1150] {0.8 C	0.161 µg/L [0.156]	Low, 81.305 %Abs		0.300 - 5.000	M22B127(
AB52426MS	MICROCYSTINS ADDA 54	0.660 Abs	0.721 µg/L	48.387 %Abs		0.300 - 5.000	M22B127(
AB52426MS	MICROCYSTINS ADDA 54	0.675 Abs [0.6675] {1.6 C	0.687 µg/L [0.704]	49.487 %Abs [48.9		0.300 - 5.000	M22B127(
AB52426MSD	MICROCYSTINS ADDA 54	0.668 Abs	0.703 µg/L	48.974 %Abs		0.300 - 5.000	M22B127(
AB52426MSD	MICROCYSTINS ADDA 54	0.646 Abs [0.6570] {2.4 C	0.756 µg/L [0.729]	47.361 %Abs [48.1		0.300 - 5.000	M22B127(
AB52427	MICROCYSTINS ADDA 54	1.155 Abs	0.130 µg/L	Low, 84.677 %Abs		0.300 - 5.000	M22B127(
AB52427	MICROCYSTINS ADDA 54	1.121 Abs [1.1380] {2.1 C	0.152 µg/L [0.141]	Low, 82.185 %Abs		0.300 - 5.000	M22B127(
AB52430	MICROCYSTINS ADDA 54	1.300 Abs	0.043 µg/L	Low, 95.308 %Abs		0.300 - 5.000	M22B127(
AB52430	MICROCYSTINS ADDA 54	1.326 Abs [1.3130] {1.4 C	0.028 µg/L [0.036]	Low, 97.214 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.815 Abs	0.444 µg/L	59.751 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.763 Abs [0.7890] {4.7 C	0.521 µg/L [0.483]	55.938 %Abs [57.8		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.344 Abs	0.017 µg/L	Low, 98.534 %Abs		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.301 Abs [1.3225] {2.3 C	0.042 µg/L [0.030]	Low, 95.381 %Abs		0.300 - 5.000	M22B127(

Note

Signature



Charles Hostetter 8/11/2022

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	
8/10/2022 2:44:44 PM					
MCT Std 0	1.379 Abs	0.000 µg/L	R ² =0.99745, 101.100 %Abs	RK1:23->A01@2	
MCT Std 0	1.349 Abs [1.3640] {1.6 CV}	0.014 µg/L [0.007] {141.4 CV}	R ² =0.99745, 98.900 %Abs	RK1:23->B01@2	
MCT Std 1	1.161 Abs	0.126 µg/L	R ² =0.99745, 85.117 %Abs	RK1:24->C01@2	
MCT Std 1	1.118 Abs [1.1395] {2.7 CV}	0.154 µg/L [0.140] {14.1 CV}	R ² =0.99745, 81.965 %Abs	RK1:24->D01@2	
MCT Std 2	0.858 Abs	0.388 µg/L	R ² =0.99745, 62.903 %Abs	RK1:25->E01@2	
MCT Std 2	0.808 Abs [0.8330] {4.2 CV}	0.453 µg/L [0.421] {10.9 CV}	R ² =0.99745, 59.238 %Abs	RK1:25->F01@3	
MCT Std 3	0.556 Abs	1.039 µg/L	R ² =0.99745, 40.762 %Abs	RK1:26->G01@3	
MCT Std 3	0.554 Abs [0.5550] {0.3 CV}	1.047 µg/L [1.043] {0.5 CV}	R ² =0.99745, 40.616 %Abs	RK1:26->H01@3	
MCT Std 4	0.457 Abs	1.588 µg/L	R ² =0.99745, 33.504 %Abs	RK1:27->A02@2	
MCT Std 4	0.441 Abs [0.4490] {2.5 CV}	1.722 µg/L [1.655] {5.7 CV}	R ² =0.99745, 32.331 %Abs	RK1:27->B02@2	
MCT Std 5	0.289 Abs	> 5.000 µg/L	21.188 %Abs	RK1:28->C02@2	
MCT Std 5	0.285 Abs [0.2870] {1.0 CV}	> 5.000 µg/L	20.894 %Abs	RK1:28->D02@2	

8/10/2022 2:44:44 PM					
MCT 546 LRB 1	1.332 Abs	0.024 µg/L	97.654 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.257 Abs [1.2945] {4.1 CV}	0.067 µg/L [0.046] {66.8 CV}	92.155 %Abs [94.905 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.843 Abs	0.407 µg/L	61.804 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.856 Abs [0.8495] {1.1 CV}	0.391 µg/L [0.399] {2.8 CV}	62.757 %Abs [62.280 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.818 Abs	0.440 µg/L	59.971 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.790 Abs [0.8040] {2.5 CV}	0.479 µg/L [0.460] {6.0 CV}	57.918 %Abs [58.944 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.3640	0.0070			
MCT Std 0 [SD]	0.0212	0.0099			
MCT Std 0 [%CV]	1.5552	141.4214			
MCT Std 1 [MEAN]	1.1395	0.1400			
MCT Std 1 [SD]	0.0304	0.0198			
MCT Std 1 [%CV]	2.6683	14.1421			
MCT Std 1 [%DIFF]		-6.6667			
MCT Std 2 [MEAN]	0.8330	0.4205			
MCT Std 2 [SD]	0.0354	0.0460			
MCT Std 2 [%CV]	4.2443	10.9303			
MCT Std 2 [%DIFF]		5.1250			
MCT Std 3 [MEAN]	0.5550	1.0430			
MCT Std 3 [SD]	0.0014	0.0057			
MCT Std 3 [%CV]	0.2548	0.5424			
MCT Std 3 [%DIFF]		4.3000			
MCT Std 4 [MEAN]	0.4490	1.6550			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0113	0.0948		
MCT Std 4 [%CV]	2.5198	5.7252		
MCT Std 4 [%DIFF]		-17.2500		
MCT Std 5 [MEAN]	0.2870			
MCT Std 5 [SD]	0.0028			
MCT Std 5 [%CV]	0.9855			
MCT 546 LRB 1 [MEAN]	1.2945	0.0455		
MCT 546 LRB 1 [SD]	0.0530	0.0304		
MCT 546 LRB 1 [%CV]	4.0968	66.8255		
MCT 546 Low-CV [MEAN]	0.8495	0.3990		
MCT 546 Low-CV [SD]	0.0092	0.0113		
MCT 546 Low-CV [%CV]	1.0821	2.8355		
MCT 546 LFB 1 [MEAN]	0.8040	0.4595		
MCT 546 LFB 1 [SD]	0.0198	0.0276		
MCT 546 LFB 1 [%CV]	2.4626	6.0016		

Assay Curve

$$y = (A-D)/(1+(x/C)^B) + D$$

Weight: NONE

A = 1.3689

B = 1.1503

C = 0.45980

D = 0.23782

R2 coef = 0.99745

50% = 0.672

