



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB51870	Raccoon Lake SRA	6/27/2022	6/29/2022	< 0.30
AB51871	Hardy Lake SRA	6/27/2022	6/29/2022	< 0.30
AB51872	Hardy Lake SRA (Field Duplicate)	6/27/2022	6/29/2022	< 0.30
AB51873	Field Blank	6/27/2022	6/29/2022	< 0.30

Test Information

Request: 6/29/2022 4:57:26 PM
Date: 6/29/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.288 Abs	0.000 µg/L	R^2=0.99340, 106.2			M22B127(
MCT Std 0	MICROCYSTINS ADDA 54	1.136 Abs [1.2120] {8.9 C	0.081 µg/L [0.041]	R^2=0.99340, 93.72			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.122 Abs	0.092 µg/L	R^2=0.99340, 92.57			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.048 Abs [1.0850] {4.8 C	0.151 µg/L [0.122]	R^2=0.99340, 86.46			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.764 Abs	0.456 µg/L	R^2=0.99340, 63.03			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.760 Abs [0.7620] {0.4 C	0.462 µg/L [0.459]	R^2=0.99340, 62.70			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.541 Abs	0.978 µg/L	R^2=0.99340, 44.63			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.555 Abs [0.5480] {1.8 C	0.927 µg/L [0.952]	R^2=0.99340, 45.79			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.435 Abs	1.572 µg/L	R^2=0.99340, 35.89			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.407 Abs [0.4210] {4.7 C	1.842 µg/L [1.707]	R^2=0.99340, 33.58			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.283 Abs	> 5.000 µg/L	23.350 %Abs			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.277 Abs [0.2800] {1.5 C	> 5.000 µg/L	22.855 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.210 Abs	0.018 µg/L	99.835 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.214 Abs [1.2120] {0.2 C	0.014 µg/L [0.016]	100.165 %Abs [100			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.789 Abs	0.420 µg/L	65.099 %Abs			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.783 Abs [0.7860] {0.5 C	0.428 µg/L [0.424]	64.604 %Abs [64.8			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.742 Abs	0.490 µg/L	61.221 %Abs			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.605 Abs [0.6735] {14.4	0.772 µg/L [0.631]	49.917 %Abs [55.5			M22B127(

Note

Signature

David Jordan

David Jordan 6/29/2022

Test Report (by Request)

Test Information

Request: 6/29/2022 4:59:20 PM
Date: 6/29/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB51870	MICROCYSTINS ADDA 54	1.091 Abs	0.116 µg/L	Low, 90.017 %Abs		0.300 - 5.000	M22B127(
AB51870	MICROCYSTINS ADDA 54	1.022 Abs [1.0565] {4.6 C	0.173 µg/L [0.144]	Low, 84.323 %Abs		0.300 - 5.000	M22B127(
AB51870MS	MICROCYSTINS ADDA 54	0.594 Abs	0.803 µg/L	49.010 %Abs		0.300 - 5.000	M22B127(
AB51870MS	MICROCYSTINS ADDA 54	0.587 Abs [0.5905] {0.8 C	0.823 µg/L [0.813]	48.432 %Abs [48.7		0.300 - 5.000	M22B127(
AB51870MSD	MICROCYSTINS ADDA 54	0.610 Abs	0.759 µg/L	50.330 %Abs		0.300 - 5.000	M22B127(
AB51870MSD	MICROCYSTINS ADDA 54	0.601 Abs [0.6055] {1.1 C	0.783 µg/L [0.771]	49.587 %Abs [49.9		0.300 - 5.000	M22B127(
AB51871	MICROCYSTINS ADDA 54	1.062 Abs	0.139 µg/L	Low, 87.624 %Abs		0.300 - 5.000	M22B127(
AB51871	MICROCYSTINS ADDA 54	0.968 Abs [1.0150] {6.5 C	0.220 µg/L [0.179]	Low, 79.868 %Abs		0.300 - 5.000	M22B127(
AB51872	MICROCYSTINS ADDA 54	0.975 Abs	0.214 µg/L	Low, 80.446 %Abs		0.300 - 5.000	M22B127(
AB51872	MICROCYSTINS ADDA 54	0.939 Abs [0.9570] {2.7 C	0.248 µg/L [0.231]	Low, 77.475 %Abs		0.300 - 5.000	M22B127(
AB51873	MICROCYSTINS ADDA 54	1.181 Abs	0.044 µg/L	Low, 97.442 %Abs		0.300 - 5.000	M22B127(
AB51873	MICROCYSTINS ADDA 54	1.153 Abs [1.1670] {1.7 C	0.067 µg/L [0.056]	Low, 95.132 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.713 Abs	0.538 µg/L	58.828 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.704 Abs [0.7085] {0.9 C	0.554 µg/L [0.546]	58.086 %Abs [58.4		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.217 Abs	0.010 µg/L	Low, 100.413 %Abs		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.257 Abs [1.2370] {2.3 C	0.000 µg/L [0.005]	Low, 103.713 %Abs		0.300 - 5.000	M22B127(

Note

Signature

David Jordan

David Jordan 6/29/2022

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	
6/29/2022 4:57:26 PM					
MCT Std 0	1.288 Abs	0.000 µg/L	R ² =0.99340, 106.271 %Abs	RK1:23->A01@2	
MCT Std 0	1.136 Abs [1.2120] {8.9 CV}	0.081 µg/L [0.041] {141.4 CV}	R ² =0.99340, 93.729 %Abs	RK1:23->B01@2	
MCT Std 1	1.122 Abs	0.092 µg/L	R ² =0.99340, 92.574 %Abs	RK1:24->C01@2	
MCT Std 1	1.048 Abs [1.0850] {4.8 CV}	0.151 µg/L [0.122] {34.3 CV}	R ² =0.99340, 86.469 %Abs	RK1:24->D01@2	
MCT Std 2	0.764 Abs	0.456 µg/L	R ² =0.99340, 63.036 %Abs	RK1:25->E01@2	
MCT Std 2	0.760 Abs [0.7620] {0.4 CV}	0.462 µg/L [0.459] {0.9 CV}	R ² =0.99340, 62.706 %Abs	RK1:25->F01@3	
MCT Std 3	0.541 Abs	0.978 µg/L	R ² =0.99340, 44.637 %Abs	RK1:26->G01@3	
MCT Std 3	0.555 Abs [0.5480] {1.8 CV}	0.927 µg/L [0.952] {3.8 CV}	R ² =0.99340, 45.792 %Abs	RK1:26->H01@3	
MCT Std 4	0.435 Abs	1.572 µg/L	R ² =0.99340, 35.891 %Abs	RK1:27->A02@2	
MCT Std 4	0.407 Abs [0.4210] {4.7 CV}	1.842 µg/L [1.707] {11.2 CV}	R ² =0.99340, 33.581 %Abs	RK1:27->B02@2	
MCT Std 5	0.283 Abs	> 5.000 µg/L	23.350 %Abs	RK1:28->C02@2	
MCT Std 5	0.277 Abs [0.2800] {1.5 CV}	> 5.000 µg/L	22.855 %Abs	RK1:28->D02@2	

6/29/2022 4:57:26 PM					
MCT 546 LRB 1	1.210 Abs	0.018 µg/L	99.835 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.214 Abs [1.2120] {0.2 CV}	0.014 µg/L [0.016] {17.7 CV}	100.165 %Abs [100.000 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.789 Abs	0.420 µg/L	65.099 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.783 Abs [0.7860] {0.5 CV}	0.428 µg/L [0.424] {1.3 CV}	64.604 %Abs [64.851 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.742 Abs	0.490 µg/L	61.221 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.605 Abs [0.6735] {14.4 CV}	0.772 µg/L [0.631] {31.6 CV}	49.917 %Abs [55.569 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.2120	0.0405			
MCT Std 0 [SD]	0.1075	0.0573			
MCT Std 0 [%CV]	8.8680	141.4214			
MCT Std 1 [MEAN]	1.0850	0.1215			
MCT Std 1 [SD]	0.0523	0.0417			
MCT Std 1 [%CV]	4.8227	34.3369			
MCT Std 1 [%DIFF]		-19.0000			
MCT Std 2 [MEAN]	0.7620	0.4590			
MCT Std 2 [SD]	0.0028	0.0042			
MCT Std 2 [%CV]	0.3712	0.9243			
MCT Std 2 [%DIFF]		14.7500			
MCT Std 3 [MEAN]	0.5480	0.9525			
MCT Std 3 [SD]	0.0099	0.0361			
MCT Std 3 [%CV]	1.8065	3.7861			
MCT Std 3 [%DIFF]		-4.7500			
MCT Std 4 [MEAN]	0.4210	1.7070			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0198	0.1909			
MCT Std 4 [%CV]	4.7028	11.1845			
MCT Std 4 [%DIFF]		-14.6500			
MCT Std 5 [MEAN]	0.2800				
MCT Std 5 [SD]	0.0042				
MCT Std 5 [%CV]	1.5152				
MCT 546 LRB 1 [MEAN]	1.2120	0.0160			
MCT 546 LRB 1 [SD]	0.0028	0.0028			
MCT 546 LRB 1 [%CV]	0.2334	17.6777			
MCT 546 Low-CV [MEAN]	0.7860	0.4240			
MCT 546 Low-CV [SD]	0.0042	0.0057			
MCT 546 Low-CV [%CV]	0.5398	1.3342			
MCT 546 LFB 1 [MEAN]	0.6735	0.6310			
MCT 546 LFB 1 [SD]	0.0969	0.1994			
MCT 546 LFB 1 [%CV]	14.3836	31.6013			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.2243
 B = 1.2678
 C = 0.49538
 D = 0.25243
 R2 coef = 0.99340
 50% = 0.770

