



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB51329	Raccoon Lake SRA	5/31/2022	6/1/2022	< 0.30
AB51330	Whitewater Memorial SP	5/31/2022	6/1/2022	< 0.30
AB51331	Field Blank	5/31/2022	6/1/2022	< 0.30
AB51332	Raccoon Lake SRA (Field Duplicate)	5/31/2022	6/1/2022	< 0.30

Test Information

Request: 6/1/2022 2:30:35 PM
Date: 6/1/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.656 Abs	0.000 µg/L	R^2=0.99890, 104.5			M21F5321
MCT Std 0	MICROCYSTINS ADDA 54	1.512 Abs [1.5840] {6.4 C	0.056 µg/L [0.028]	R^2=0.99890, 95.45			M21F5321
MCT Std 1	MICROCYSTINS ADDA 54	1.357 Abs	0.171 µg/L	R^2=0.99890, 85.66			M21F5321
MCT Std 1	MICROCYSTINS ADDA 54	1.376 Abs [1.3665] {1.0 C	0.157 µg/L [0.164]	R^2=0.99890, 86.86			M21F5321
MCT Std 2	MICROCYSTINS ADDA 54	1.155 Abs	0.348 µg/L	R^2=0.99890, 72.91			M21F5321
MCT Std 2	MICROCYSTINS ADDA 54	1.104 Abs [1.1295] {3.2 C	0.401 µg/L [0.374]	R^2=0.99890, 69.65			M21F5321
MCT Std 3	MICROCYSTINS ADDA 54	0.752 Abs	0.993 µg/L	R^2=0.99890, 47.47			M21F5321
MCT Std 3	MICROCYSTINS ADDA 54	0.710 Abs [0.7310] {4.1 C	1.114 µg/L [1.053]	R^2=0.99890, 44.82			M21F5321
MCT Std 4	MICROCYSTINS ADDA 54	0.548 Abs	1.848 µg/L	R^2=0.99890, 34.55			M21F5321
MCT Std 4	MICROCYSTINS ADDA 54	0.517 Abs [0.5325] {4.1 C	2.077 µg/L [1.962]	R^2=0.99890, 32.63			M21F5321
MCT Std 5	MICROCYSTINS ADDA 54	0.364 Abs	4.766 µg/L	R^2=0.99890, 22.96			M21F5321
MCT Std 5	MICROCYSTINS ADDA 54	0.354 Abs [0.3590] {2.0 C	> 5.000 µg/L [4.76]	22.348 %Abs			M21F5321
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.586 Abs	0.000 µg/L	100.126 %Abs			M21F5321
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.539 Abs [1.5625] {2.1 C	0.036 µg/L [0.018]	97.159 %Abs [98.6			M21F5321
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.063 Abs	0.448 µg/L	67.109 %Abs			M21F5321
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.074 Abs [1.0685] {0.7 C	0.435 µg/L [0.442]	67.803 %Abs [67.4			M21F5321
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.959 Abs	0.585 µg/L	60.543 %Abs			M21F5321
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.928 Abs [0.9435] {2.3 C	0.633 µg/L [0.609]	58.586 %Abs [59.5			M21F5321

Note

Signature 

David Jordan 6/1/2022

Test Information

Request: 6/1/2022 2:31:07 PM
Date: 6/1/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB51329	MICROCYSTINS ADDA 54	1.491 Abs	0.072 µg/L	Low, 94.129 %Abs		0.300 - 5.000	M21F532 ¹
AB51329	MICROCYSTINS ADDA 54	1.501 Abs [1.4960] {0.5 C	0.064 µg/L [0.068]	Low, 94.760 %Abs		0.300 - 5.000	M21F532 ¹
AB51330	MICROCYSTINS ADDA 54	1.501 Abs	0.064 µg/L	Low, 94.760 %Abs		0.300 - 5.000	M21F532 ¹
AB51330	MICROCYSTINS ADDA 54	1.454 Abs [1.4775] {2.2 C	0.099 µg/L [0.082]	Low, 91.793 %Abs		0.300 - 5.000	M21F532 ¹
AB51330MS	MICROCYSTINS ADDA 54	0.845 Abs	0.780 µg/L	53.346 %Abs		0.300 - 5.000	M21F532 ¹
AB51330MS	MICROCYSTINS ADDA 54	0.838 Abs [0.8415] {0.6 C	0.794 µg/L [0.787]	52.904 %Abs [53.1		0.300 - 5.000	M21F532 ¹
AB51330MSD	MICROCYSTINS ADDA 54	0.865 Abs	0.742 µg/L	54.609 %Abs		0.300 - 5.000	M21F532 ¹
AB51330MSD	MICROCYSTINS ADDA 54	0.837 Abs [0.8510] {2.3 C	0.796 µg/L [0.769]	52.841 %Abs [53.7		0.300 - 5.000	M21F532 ¹
AB51331	MICROCYSTINS ADDA 54	1.505 Abs	0.062 µg/L	Low, 95.013 %Abs		0.300 - 5.000	M21F532 ¹
AB51331	MICROCYSTINS ADDA 54	1.488 Abs [1.4965] {0.8 C	0.074 µg/L [0.068]	Low, 93.939 %Abs		0.300 - 5.000	M21F532 ¹
AB51332	MICROCYSTINS ADDA 54	1.614 Abs	0.000 µg/L	Low, 101.894 %Abs		0.300 - 5.000	M21F532 ¹
AB51332	MICROCYSTINS ADDA 54	1.555 Abs [1.5845] {2.6 C	0.023 µg/L [0.012]	Low, 98.169 %Abs		0.300 - 5.000	M21F532 ¹
LFB 2	MICROCYSTINS ADDA 54	0.924 Abs	0.639 µg/L	58.333 %Abs		0.300 - 5.000	M21F532 ¹
LFB 2	MICROCYSTINS ADDA 54	0.901 Abs [0.9125] {1.8 C	0.677 µg/L [0.658]	56.881 %Abs [57.6		0.300 - 5.000	M21F532 ¹
LRB 2	MICROCYSTINS ADDA 54	1.659 Abs	0.000 µg/L	Low, 104.735 %Abs		0.300 - 5.000	M21F532 ¹
LRB 2	MICROCYSTINS ADDA 54	1.655 Abs [1.6570] {0.2 C	0.000 µg/L [0.000]	Low, 104.482 %Abs		0.300 - 5.000	M21F532 ¹
QCS	MICROCYSTINS ADDA 54	0.904 Abs	0.672 µg/L	57.071 %Abs		0.300 - 5.000	M21F532 ¹
QCS	MICROCYSTINS ADDA 54	0.865 Abs [0.8845] {3.1 C	0.742 µg/L [0.707]	54.609 %Abs [55.8		0.300 - 5.000	M21F532 ¹

Note

Signature

David Jordan

David Jordan 6/1/2022

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: M21F5321

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
6/1/2022 2:30:35 PM					
MCT Std 0	1.656 Abs	0.000 µg/L	R ² =0.99890, 104.545 %Abs	RK1:23->A01@2	
MCT Std 0	1.512 Abs [1.5840] {6.4 CV}	0.056 µg/L [0.028] {141.4 CV}	R ² =0.99890, 95.455 %Abs	RK1:23->B01@2	
MCT Std 1	1.357 Abs	0.171 µg/L	R ² =0.99890, 85.669 %Abs	RK1:24->C01@2	
MCT Std 1	1.376 Abs [1.3665] {1.0 CV}	0.157 µg/L [0.164] {6.0 CV}	R ² =0.99890, 86.869 %Abs	RK1:24->D01@2	
MCT Std 2	1.155 Abs	0.348 µg/L	R ² =0.99890, 72.917 %Abs	RK1:25->E01@2	
MCT Std 2	1.104 Abs [1.1295] {3.2 CV}	0.401 µg/L [0.374] {10.0 CV}	R ² =0.99890, 69.697 %Abs	RK1:25->F01@3	
MCT Std 3	0.752 Abs	0.993 µg/L	R ² =0.99890, 47.475 %Abs	RK1:26->G01@3	
MCT Std 3	0.710 Abs [0.7310] {4.1 CV}	1.114 µg/L [1.053] {8.1 CV}	R ² =0.99890, 44.823 %Abs	RK1:26->H01@3	
MCT Std 4	0.548 Abs	1.848 µg/L	R ² =0.99890, 34.596 %Abs	RK1:27->A02@2	
MCT Std 4	0.517 Abs [0.5325] {4.1 CV}	2.077 µg/L [1.962] {8.3 CV}	R ² =0.99890, 32.639 %Abs	RK1:27->B02@2	
MCT Std 5	0.364 Abs	4.766 µg/L	R ² =0.99890, 22.980 %Abs	RK1:28->C02@2	
MCT Std 5	0.354 Abs [0.3590] {2.0 CV}	> 5.000 µg/L [4.766]	22.348 %Abs	RK1:28->D02@2	

6/1/2022 2:30:35 PM					
MCT 546 LRB 1	1.586 Abs	0.000 µg/L	100.126 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.539 Abs [1.5625] {2.1 CV}	0.036 µg/L [0.018] {141.4 CV}	97.159 %Abs [98.643 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	1.063 Abs	0.448 µg/L	67.109 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	1.074 Abs [1.0685] {0.7 CV}	0.435 µg/L [0.442] {2.1 CV}	67.803 %Abs [67.456 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.959 Abs	0.585 µg/L	60.543 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.928 Abs [0.9435] {2.3 CV}	0.633 µg/L [0.609] {5.6 CV}	58.586 %Abs [59.564 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.5840	0.0280			
MCT Std 0 [SD]	0.1018	0.0396			
MCT Std 0 [%CV]	6.4282	141.4214			
MCT Std 1 [MEAN]	1.3665	0.1640			
MCT Std 1 [SD]	0.0134	0.0099			
MCT Std 1 [%CV]	0.9832	6.0363			
MCT Std 1 [%DIFF]		9.3333			
MCT Std 2 [MEAN]	1.1295	0.3745			
MCT Std 2 [SD]	0.0361	0.0375			
MCT Std 2 [%CV]	3.1928	10.0071			
MCT Std 2 [%DIFF]		-6.3750			
MCT Std 3 [MEAN]	0.7310	1.0535			
MCT Std 3 [SD]	0.0297	0.0856			
MCT Std 3 [%CV]	4.0627	8.1215			
MCT Std 3 [%DIFF]		5.3500			
MCT Std 4 [MEAN]	0.5325	1.9625			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0219	0.1619			
MCT Std 4 [%CV]	4.1165	8.2511			
MCT Std 4 [%DIFF]		-1.8750			
MCT Std 5 [MEAN]	0.3590				
MCT Std 5 [SD]	0.0071				
MCT Std 5 [%CV]	1.9697				
MCT 546 LRB 1 [MEAN]	1.5625	0.0180			
MCT 546 LRB 1 [SD]	0.0332	0.0255			
MCT 546 LRB 1 [%CV]	2.1270	141.4214			
MCT 546 Low-CV [MEAN]	1.0685	0.4415			
MCT 546 Low-CV [SD]	0.0078	0.0092			
MCT 546 Low-CV [%CV]	0.7280	2.0821			
MCT 546 LFB 1 [MEAN]	0.9435	0.6090			
MCT 546 LFB 1 [SD]	0.0219	0.0339			
MCT 546 LFB 1 [%CV]	2.3233	5.5733			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5785
 B = 1.2003
 C = 0.65326
 D = 0.25218
 R2 coef = 0.99890
 50% = 0.894

