



## Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB48329	Raccoon Lake SRA	8/23/2021	8/26/2021	< 0.30
AB48330	Cagles Mill Lake Beach	8/23/2021	8/26/2021	< 0.30
AB48331	Paynetown SRA	8/23/2021	8/26/2021	< 0.30
AB48332	Fairfax SRA	8/23/2021	8/26/2021	< 0.30
AB48333	Starve Hollow SRA	8/23/2021	8/26/2021	< 0.30
AB48334	Whitewater Memorial SP	8/24/2021	8/26/2021	< 0.30
AB48335	Mounds SRA	8/24/2021	8/26/2021	< 0.30
AB48336	Hardy Lake SRA	8/24/2021	8/26/2021	< 0.30
AB48337	Starve Hollow SRA (Field Duplicate)	8/23/2021	8/26/2021	< 0.30
AB48338	Field Blank	8/23/2021	8/26/2021	< 0.30
AB48373	Kunkel Beach @ Ouabache SP	8/23/2021	8/26/2021	< 0.30

## Test Information

Request: 8/26/2021 1:09:56 PM  
Date: 8/26/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.390 Abs	0.009 µg/L	R^2=0.99664, 99.64			20J4209
MCT Std 0	MICROCYSTINS ADDA 54	1.400 Abs [1.3950] {0.5 C	0.002 µg/L [0.006]	R^2=0.99664, 100.3			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.186 Abs	0.128 µg/L	R^2=0.99664, 85.01			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.171 Abs [1.1785] {0.9 C	0.138 µg/L [0.133]	R^2=0.99664, 83.94			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	0.839 Abs	0.445 µg/L	R^2=0.99664, 60.14			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	0.842 Abs [0.8405] {0.3 C	0.441 µg/L [0.443]	R^2=0.99664, 60.35			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.618 Abs	0.912 µg/L	R^2=0.99664, 44.30			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.587 Abs [0.6025] {3.6 C	1.024 µg/L [0.968]	R^2=0.99664, 42.07			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.476 Abs	1.674 µg/L	R^2=0.99664, 34.12			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.465 Abs [0.4705] {1.7 C	1.775 µg/L [1.724]	R^2=0.99664, 33.33			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.318 Abs	> 5.000 µg/L	22.796 %Abs			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.323 Abs [0.3205] {1.1 C	> 5.000 µg/L	23.154 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.340 Abs	0.038 µg/L	96.057 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.307 Abs [1.3235] {1.8 C	0.057 µg/L [0.047]	93.692 %Abs [94.8			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.903 Abs	0.365 µg/L	64.731 %Abs			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.920 Abs [0.9115] {1.3 C	0.346 µg/L [0.355]	65.950 %Abs [65.3			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.761 Abs	0.567 µg/L	54.552 %Abs			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.722 Abs [0.7415] {3.7 C	0.641 µg/L [0.604]	51.756 %Abs [53.1			20J4209

## Note

Signature

*David Jordan*

David Jordan 8/26/2021

# Test Report (by Request)

## Test Information

Request: 8/26/2021 1:11:12 PM  
Date: 8/26/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB48329	MICROCYSTINS ADDA 54	1.270 Abs	0.078 µg/L	Low, 91.039 %Abs		0.300 - 5.000	20J4209
AB48329	MICROCYSTINS ADDA 54	1.235 Abs [1.2525] {2.0 C	0.098 µg/L [0.088]	Low, 88.530 %Abs		0.300 - 5.000	20J4209
AB48330	MICROCYSTINS ADDA 54	1.168 Abs	0.140 µg/L	Low, 83.728 %Abs		0.300 - 5.000	20J4209
AB48330	MICROCYSTINS ADDA 54	1.118 Abs [1.1430] {3.1 C	0.174 µg/L [0.157]	Low, 80.143 %Abs		0.300 - 5.000	20J4209
AB48331	MICROCYSTINS ADDA 54	1.162 Abs	0.144 µg/L	Low, 83.297 %Abs		0.300 - 5.000	20J4209
AB48331	MICROCYSTINS ADDA 54	1.118 Abs [1.1400] {2.7 C	0.174 µg/L [0.159]	Low, 80.143 %Abs		0.300 - 5.000	20J4209
AB48332	MICROCYSTINS ADDA 54	1.189 Abs	0.126 µg/L	Low, 85.233 %Abs		0.300 - 5.000	20J4209
AB48332	MICROCYSTINS ADDA 54	1.181 Abs [1.1850] {0.5 C	0.131 µg/L [0.128]	Low, 84.659 %Abs		0.300 - 5.000	20J4209
AB48333	MICROCYSTINS ADDA 54	1.166 Abs	0.141 µg/L	Low, 83.584 %Abs		0.300 - 5.000	20J4209
AB48333	MICROCYSTINS ADDA 54	1.152 Abs [1.1590] {0.9 C	0.150 µg/L [0.146]	Low, 82.581 %Abs		0.300 - 5.000	20J4209
AB48334	MICROCYSTINS ADDA 54	1.197 Abs	0.121 µg/L	Low, 85.806 %Abs		0.300 - 5.000	20J4209
AB48334	MICROCYSTINS ADDA 54	1.164 Abs [1.1805] {2.0 C	0.142 µg/L [0.132]	Low, 83.441 %Abs		0.300 - 5.000	20J4209
AB48334MS	MICROCYSTINS ADDA 54	0.641 Abs	0.840 µg/L	45.950 %Abs		0.300 - 5.000	20J4209
AB48334MS	MICROCYSTINS ADDA 54	0.638 Abs [0.6395] {0.3 C	0.849 µg/L [0.844]	45.735 %Abs [45.8		0.300 - 5.000	20J4209
AB48334MSD	MICROCYSTINS ADDA 54	0.693 Abs	0.705 µg/L	49.677 %Abs		0.300 - 5.000	20J4209
AB48334MSD	MICROCYSTINS ADDA 54	0.674 Abs [0.6835] {2.0 C	0.750 µg/L [0.727]	48.315 %Abs [48.9		0.300 - 5.000	20J4209
AB48335	MICROCYSTINS ADDA 54	1.076 Abs	0.205 µg/L	Low, 77.133 %Abs		0.300 - 5.000	20J4209
AB48335	MICROCYSTINS ADDA 54	1.064 Abs [1.0700] {0.8 C	0.214 µg/L [0.209]	Low, 76.272 %Abs		0.300 - 5.000	20J4209
AB48336	MICROCYSTINS ADDA 54	1.011 Abs	0.258 µg/L	Low, 72.473 %Abs		0.300 - 5.000	20J4209
AB48336	MICROCYSTINS ADDA 54	1.004 Abs [1.0075] {0.5 C	0.264 µg/L [0.261]	Low, 71.971 %Abs		0.300 - 5.000	20J4209
AB48337	MICROCYSTINS ADDA 54	1.102 Abs	0.185 µg/L	Low, 78.996 %Abs		0.300 - 5.000	20J4209
AB48337	MICROCYSTINS ADDA 54	1.077 Abs [1.0895] {1.6 C	0.204 µg/L [0.194]	Low, 77.204 %Abs		0.300 - 5.000	20J4209
AB48338	MICROCYSTINS ADDA 54	1.352 Abs	0.031 µg/L	Low, 96.918 %Abs		0.300 - 5.000	20J4209
AB48338	MICROCYSTINS ADDA 54	1.360 Abs [1.3560] {0.4 C	0.027 µg/L [0.029]	Low, 97.491 %Abs		0.300 - 5.000	20J4209
AB48373	MICROCYSTINS ADDA 54	1.189 Abs	0.126 µg/L	Low, 85.233 %Abs		0.300 - 5.000	20J4209
AB48373	MICROCYSTINS ADDA 54	1.207 Abs [1.1980] {1.1 C	0.115 µg/L [0.120]	Low, 86.523 %Abs		0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.707 Abs	0.673 µg/L	50.681 %Abs		0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.709 Abs [0.7080] {0.2 C	0.669 µg/L [0.671]	50.824 %Abs [50.7		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.272 Abs	0.076 µg/L	Low, 91.183 %Abs		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.265 Abs [1.2685] {0.4 C	0.080 µg/L [0.078]	Low, 90.681 %Abs		0.300 - 5.000	20J4209

## Note

Signature

*David Jordan*

David Jordan 8/26/2021

## 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: 20J4209

## Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
8/26/2021 1:09:56 PM					
MCT Std 0	1.390 Abs	0.009 µg/L	R <sup>2</sup> =0.99664, 99.642 %Abs	RK1:23->A01@2	
MCT Std 0	1.400 Abs [1.3950] {0.5 CV}	0.002 µg/L [0.006] {90.0 CV}	R <sup>2</sup> =0.99664, 100.358 %Abs	RK1:23->B01@2	
MCT Std 1	1.186 Abs	0.128 µg/L	R <sup>2</sup> =0.99664, 85.018 %Abs	RK1:24->C01@2	
MCT Std 1	1.171 Abs [1.1785] {0.9 CV}	0.138 µg/L [0.133] {5.3 CV}	R <sup>2</sup> =0.99664, 83.943 %Abs	RK1:24->D01@2	
MCT Std 2	0.839 Abs	0.445 µg/L	R <sup>2</sup> =0.99664, 60.143 %Abs	RK1:25->E01@2	
MCT Std 2	0.842 Abs [0.8405] {0.3 CV}	0.441 µg/L [0.443] {0.6 CV}	R <sup>2</sup> =0.99664, 60.358 %Abs	RK1:25->F01@3	
MCT Std 3	0.618 Abs	0.912 µg/L	R <sup>2</sup> =0.99664, 44.301 %Abs	RK1:26->G01@3	
MCT Std 3	0.587 Abs [0.6025] {3.6 CV}	1.024 µg/L [0.968] {8.2 CV}	R <sup>2</sup> =0.99664, 42.079 %Abs	RK1:26->H01@3	
MCT Std 4	0.476 Abs	1.674 µg/L	R <sup>2</sup> =0.99664, 34.122 %Abs	RK1:27->A02@2	
MCT Std 4	0.465 Abs [0.4705] {1.7 CV}	1.775 µg/L [1.724] {4.1 CV}	R <sup>2</sup> =0.99664, 33.333 %Abs	RK1:27->B02@2	
MCT Std 5	0.318 Abs	> 5.000 µg/L	22.796 %Abs	RK1:28->C02@2	
MCT Std 5	0.323 Abs [0.3205] {1.1 CV}	> 5.000 µg/L	23.154 %Abs	RK1:28->D02@2	
*****					
8/26/2021 1:09:56 PM					
MCT 546 LRB 1	1.340 Abs	0.038 µg/L	96.057 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.307 Abs [1.3235] {1.8 CV}	0.057 µg/L [0.047] {28.3 CV}	93.692 %Abs [94.875 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.903 Abs	0.365 µg/L	64.731 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.920 Abs [0.9115] {1.3 CV}	0.346 µg/L [0.355] {3.8 CV}	65.950 %Abs [65.341 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.761 Abs	0.567 µg/L	54.552 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.722 Abs [0.7415] {3.7 CV}	0.641 µg/L [0.604] {8.7 CV}	51.756 %Abs [53.154 %Abs]	RK1:31->B03@2	
*****					
Statistic					
MCT Std 0 [MEAN]	1.3950	0.0055			
MCT Std 0 [SD]	0.0071	0.0049			
MCT Std 0 [%CV]	0.5069	89.9954			
MCT Std 1 [MEAN]	1.1785	0.1330			
MCT Std 1 [SD]	0.0106	0.0071			
MCT Std 1 [%CV]	0.9000	5.3166			
MCT Std 1 [%DIFF]		-11.3333			
MCT Std 2 [MEAN]	0.8405	0.4430			
MCT Std 2 [SD]	0.0021	0.0028			
MCT Std 2 [%CV]	0.2524	0.6385			
MCT Std 2 [%DIFF]		10.7500			
MCT Std 3 [MEAN]	0.6025	0.9680			
MCT Std 3 [SD]	0.0219	0.0792			
MCT Std 3 [%CV]	3.6382	8.1814			
MCT Std 3 [%DIFF]		-3.2000			
MCT Std 4 [MEAN]	0.4705	1.7245			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0078	0.0714		
MCT Std 4 [%CV]	1.6532	4.1414		
MCT Std 4 [%DIFF]		-13.7750		
MCT Std 5 [MEAN]	0.3205			
MCT Std 5 [SD]	0.0035			
MCT Std 5 [%CV]	1.1031			
MCT 546 LRB 1 [MEAN]	1.3235	0.0475		
MCT 546 LRB 1 [SD]	0.0233	0.0134		
MCT 546 LRB 1 [%CV]	1.7631	28.2843		
MCT 546 Low-CV [MEAN]	0.9115	0.3555		
MCT 546 Low-CV [SD]	0.0120	0.0134		
MCT 546 Low-CV [%CV]	1.3188	3.7792		
MCT 546 LFB 1 [MEAN]	0.7415	0.6040		
MCT 546 LFB 1 [SD]	0.0276	0.0523		
MCT 546 LFB 1 [%CV]	3.7191	8.6632		

#### Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$   
 Weight: NONE  
 A = 1.4021  
 B = 1.1546  
 C = 0.44583  
 D = 0.27495  
 R2 coef = 0.99664  
 50% = 0.694

