



## Microcystin ADDA ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

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<b>Sample #</b>	<b>Location</b>	<b>Date Collected</b>	<b>Date Analyzed</b>	<b>Conc. (ppb)</b>
AB43437	Summit Lake - State Park	7/21/2020	7/22/2020	<0.30
AB43439	Pokagon State Park	7/20/2020	7/22/2020	<0.30
AB43440	Potawatomi Inn's Beach	7/20/2020	7/22/2020	<0.30
AB43441	Chain O'Lakes SP	7/20/2020	7/22/2020	<0.30
AB43442	Potato Creek State Park	7/20/2020	7/22/2020	<0.30
AB43443	Lost Bridge West SRA	7/20/2020	7/22/2020	<0.30
AB43444	Mississinewa Lake Miami SRA	7/20/2020	7/22/2020	<0.30
AB43445	Pokagon State Park (Field Duplicate)	7/20/2020	7/22/2020	<0.30
AB43446	Field Blank	7/20/2020	7/22/2020	<0.30

**Test Information**

Request: 7/22/2020 2:54:32 PM

Date: 7/22/2020 - 7/22/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
MCT Std 0	MICROCYSTINS ADDA 546	1.006 Abs	0.007 µg/L	R <sup>2</sup> =0.99683, 99.604		19L2093
MCT Std 0	MICROCYSTINS ADDA 546	1.014 Abs [1.0100] {0.6 CV}	0.000 µg/L [0.004] {1	R <sup>2</sup> =0.99683, 100.39		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	0.887 Abs	0.137 µg/L	R <sup>2</sup> =0.99683, 87.822		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	0.870 Abs [0.8785] {1.4 CV}	0.157 µg/L [0.147] {9	R <sup>2</sup> =0.99683, 86.139		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.725 Abs	0.370 µg/L	R <sup>2</sup> =0.99683, 71.782		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.703 Abs [0.7140] {2.2 CV}	0.411 µg/L [0.391] {7	R <sup>2</sup> =0.99683, 69.604		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.494 Abs	1.076 µg/L	R <sup>2</sup> =0.99683, 48.911		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.480 Abs [0.4870] {2.0 CV}	1.153 µg/L [1.115] {4	R <sup>2</sup> =0.99683, 47.525		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.411 Abs	1.677 µg/L	R <sup>2</sup> =0.99683, 40.693		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.406 Abs [0.4085] {0.9 CV}	1.728 µg/L [1.703] {2	R <sup>2</sup> =0.99683, 40.198		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.276 Abs	> 5.000 µg/L	27.327 %Abs		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.268 Abs [0.2720] {2.1 CV}	> 5.000 µg/L	26.535 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	0.961 Abs	0.055 µg/L	95.149 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	0.936 Abs [0.9485] {1.9 CV}	0.082 µg/L [0.068] {2	92.673 %Abs [93.911		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.794 Abs	0.258 µg/L	78.614 %Abs		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.779 Abs [0.7865] {1.3 CV}	0.280 µg/L [0.269] {5	77.129 %Abs [77.87		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.678 Abs	0.462 µg/L	67.129 %Abs		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.680 Abs [0.6790] {0.2 CV}	0.458 µg/L [0.460] {0	67.327 %Abs [67.228		19L2093

**Note**

Signature

Charles Hostetter 7/23/2020

# Test Report (by Request)

**Test Information**

 Request: 7/22/2020 3:07:10 PM  
 Date: 7/22/2020 - 7/22/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
AB43437	MICROCYSTINS ADDA 546	0.878 Abs	0.147 µg/L	<b>LOW, 86.931 %ABS</b>	0.300 - 5.000	19L2093
AB43437	MICROCYSTINS ADDA 546	0.859 Abs [0.8685] {1.5 CV}	0.170 µg/L [0.159] {1}		0.300 - 5.000	19L2093
AB43439	MICROCYSTINS ADDA 546	0.930 Abs	0.088 µg/L	<b>LOW, 92.079 %ABS</b>	0.300 - 5.000	19L2093
AB43439	MICROCYSTINS ADDA 546	0.904 Abs [0.9170] {2.0 CV}	0.117 µg/L [0.102] {2}		0.300 - 5.000	19L2093
AB43440	MICROCYSTINS ADDA 546	0.969 Abs	0.047 µg/L	<b>LOW, 95.941 %ABS</b>	0.300 - 5.000	19L2093
AB43440	MICROCYSTINS ADDA 546	0.948 Abs [0.9585] {1.5 CV}	0.069 µg/L [0.058] {2}		0.300 - 5.000	19L2093
AB43440MS	MICROCYSTINS ADDA 546	0.636 Abs	0.560 µg/L	62.970 %Abs	0.300 - 5.000	19L2093
AB43440MS	MICROCYSTINS ADDA 546	0.662 Abs [0.6490] {2.8 CV}	0.498 µg/L [0.529] {8}	65.545 %Abs [64.25]	0.300 - 5.000	19L2093
AB43440MSD	MICROCYSTINS ADDA 546	0.628 Abs	0.580 µg/L	62.178 %Abs	0.300 - 5.000	19L2093
AB43440MSD	MICROCYSTINS ADDA 546	0.621 Abs [0.6245] {0.8 CV}	0.599 µg/L [0.589] {2}	61.485 %Abs [61.83]	0.300 - 5.000	19L2093
AB43441	MICROCYSTINS ADDA 546	0.903 Abs	0.118 µg/L	<b>LOW, 89.406 %ABS</b>	0.300 - 5.000	19L2093
AB43441	MICROCYSTINS ADDA 546	0.902 Abs [0.9025] {0.1 CV}	0.119 µg/L [0.119] {0}		0.300 - 5.000	19L2093
AB43442	MICROCYSTINS ADDA 546	0.905 Abs	0.116 µg/L	<b>LOW, 89.604 %ABS</b>	0.300 - 5.000	19L2093
AB43442	MICROCYSTINS ADDA 546	0.937 Abs [0.9210] {2.5 CV}	0.081 µg/L [0.098] {2}		0.300 - 5.000	19L2093
AB43443	MICROCYSTINS ADDA 546	0.815 Abs	0.228 µg/L	<b>LOW, 80.693 %ABS</b>	0.300 - 5.000	19L2093
AB43443	MICROCYSTINS ADDA 546	0.813 Abs [0.8140] {0.2 CV}	0.231 µg/L [0.229] {0}		0.300 - 5.000	19L2093
AB43444	MICROCYSTINS ADDA 546	0.904 Abs	0.117 µg/L	<b>LOW, 89.505 %ABS</b>	0.300 - 5.000	19L2093
AB43444	MICROCYSTINS ADDA 546	0.861 Abs [0.8825] {3.4 CV}	0.168 µg/L [0.142] {2}		0.300 - 5.000	19L2093
AB43445	MICROCYSTINS ADDA 546	0.904 Abs	0.117 µg/L	<b>LOW, 89.505 %ABS</b>	0.300 - 5.000	19L2093
AB43445	MICROCYSTINS ADDA 546	0.912 Abs [0.9080] {0.6 CV}	0.108 µg/L [0.112] {5}		0.300 - 5.000	19L2093
AB43446	MICROCYSTINS ADDA 546	0.941 Abs	0.076 µg/L	<b>LOW, 93.168 %ABS</b>	0.300 - 5.000	19L2093
AB43446	MICROCYSTINS ADDA 546	0.905 Abs [0.9230] {2.8 CV}	0.116 µg/L [0.096] {2}		0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.646 Abs	0.535 µg/L	63.960 %Abs	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.638 Abs [0.6420] {0.9 CV}	0.555 µg/L [0.545] {2}	63.168 %Abs [63.56]	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	0.947 Abs	0.070 µg/L	<b>LOW, 93.762 %ABS</b>	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	0.913 Abs [0.9300] {2.6 CV}	0.107 µg/L [0.089] {2}		0.300 - 5.000	19L2093

**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:

Assay Mode: 4-Parameter Logistic Weight by:None  
 Well Type: Flat bottom  
 Last Modified On: 8/13/2019 2:01:59 PM  
 Normal: 0.300 - 5.000  
 # of decimals: 3  
 Kit Lot Number: 19L2093

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 Calibration**

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
<b>7/22/2020 2:54:32 PM</b>				
MCT Std 0	1.006 Abs		R <sup>2</sup> =0.99683, 99.604 %Abs	RK1:23->A01@2
MCT Std 0	1.014 Abs [1.0100] {0.6 CV}		R <sup>2</sup> =0.99683, 100.396 %Abs	RK1:23->B01@2
MCT Std 1	0.887 Abs		R <sup>2</sup> =0.99683, 87.822 %Abs	RK1:24->C01@2
MCT Std 1	0.870 Abs [0.8785] {1.4 CV}		R <sup>2</sup> =0.99683, 86.139 %Abs	RK1:24->D01@2
MCT Std 2	0.725 Abs		R <sup>2</sup> =0.99683, 71.782 %Abs	RK1:25->E01@2
MCT Std 2	0.703 Abs [0.7140] {2.2 CV}		R <sup>2</sup> =0.99683, 69.604 %Abs	RK1:25->F01@3
MCT Std 3	0.494 Abs		R <sup>2</sup> =0.99683, 48.911 %Abs	RK1:26->G01@3
MCT Std 3	0.480 Abs [0.4870] {2.0 CV}		R <sup>2</sup> =0.99683, 47.525 %Abs	RK1:26->H01@3
MCT Std 4	0.411 Abs		R <sup>2</sup> =0.99683, 40.693 %Abs	RK1:27->A02@2
MCT Std 4	0.406 Abs [0.4085] {0.9 CV}		R <sup>2</sup> =0.99683, 40.198 %Abs	RK1:27->B02@2
MCT Std 5	0.276 Abs		27.327 %Abs	RK1:28->C02@2
MCT Std 5	0.268 Abs [0.2720] {2.1 CV}		26.535 %Abs	RK1:28->D02@2
*****				
<b>7/22/2020 2:54:32 PM</b>				
MCT 546 LRB 1	0.961 Abs		95.149 %Abs	RK1:29->E02@2
MCT 546 LRB 1	0.936 Abs [0.9485] {1.9 CV}		92.673 %Abs [93.911 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	0.794 Abs		78.614 %Abs	RK1:30->G02@3
MCT 546 Low-CV	0.779 Abs [0.7865] {1.3 CV}		77.129 %Abs [77.871 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.678 Abs		67.129 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.680 Abs [0.6790] {0.2 CV}		67.327 %Abs [67.228 %Abs]	RK1:31->B03@2
*****				
<b>Statistic</b>				
MCT Std 0 [MEAN]	1.0100			
MCT Std 0 [SD]	0.0057			
MCT Std 0 [%CV]	0.5601			
MCT Std 1 [MEAN]	0.8785			
MCT Std 1 [SD]	0.0120			
MCT Std 1 [%CV]	1.3683			
MCT Std 1 [%DIFF]				
MCT Std 2 [MEAN]	0.7140			
MCT Std 2 [SD]	0.0156			
MCT Std 2 [%CV]	2.1788			
MCT Std 2 [%DIFF]				
MCT Std 3 [MEAN]	0.4870			
MCT Std 3 [SD]	0.0099			
MCT Std 3 [%CV]	2.0328			
MCT Std 3 [%DIFF]				
MCT Std 4 [MEAN]	0.4085			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0035			
MCT Std 4 [%CV]	0.8655			
MCT Std 4 [%DIFF]				
MCT Std 5 [MEAN]	0.2720			
MCT Std 5 [SD]	0.0057			
MCT Std 5 [%CV]	2.0797			
MCT 546 LRB 1 [MEAN]	0.9485			
MCT 546 LRB 1 [SD]	0.0177			
MCT 546 LRB 1 [%CV]	1.8638			
MCT 546 Low-CV [MEAN]	0.7865			
MCT 546 Low-CV [SD]	0.0106			
MCT 546 Low-CV [%CV]	1.3486			
MCT 546 LFB 1 [MEAN]	0.6790			
MCT 546 LFB 1 [SD]	0.0014			
MCT 546 LFB 1 [%CV]	0.2083			

**Assay Curve**

$y = (A-D)/(1+(x/C)^B) + D$   
 Weight: NONE  
 A = 1.0117  
 B = 1.1090  
 C = 0.62871  
 D = 0.20866  
 R2 coef = 0.99683  
 50% = 1.020

