



## Microcystins Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

<b>Sample #</b>	<b>Location</b>	<b>Date Collected</b>	<b>Date Analyzed</b>	<b>Conc. (ug/L)</b>
AB42361	Potowatomi Inn's Beach	5/18/2020	5/20/2020	< 0.30
AB42362	Kunkel Beach @ Oubache State Park	5/18/2020	5/20/2020	< 0.30
AB42363	Summit Lake - State Park	5/18/2020	5/20/2020	< 0.30
AB42364	Pokagon State Park	5/18/2020	5/20/2020	< 0.30
AB42365	Potato Creek State Park	5/19/2020	5/20/2020	< 0.30
AB42366	Lost Bridge West SRA	5/19/2020	5/20/2020	< 0.30
AB42367	Chain O'Lakes SP	5/18/2020	5/20/2020	< 0.30
AB42368	Mississinewa Lake Miami SRA	5/19/2020	5/20/2020	< 0.30
AB42369	Kunkel Beach (Field Duplicate)	5/18/2020	5/20/2020	< 0.30
AB42370	Field Blank	5/18/2020	5/20/2020	< 0.30

## Test Information

Request: 5/20/2020 3:24:43 PM

Date: 5/20/2020 - 5/20/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
MCT Std 0	MICROCYSTINS ADDA 546	1.257 Abs	0.004 µg/L	R^2=0.99887, 100.15		19L2093
MCT Std 0	MICROCYSTINS ADDA 546	1.254 Abs [1.2555] {0.2 CV}	0.007 µg/L [0.006] {3}	R^2=0.99887, 100.00		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.077 Abs	0.145 µg/L	R^2=0.99887, 85.817		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.092 Abs [1.0845] {1.0 CV}	0.133 µg/L [0.139] {6}	R^2=0.99887, 87.012		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.818 Abs	0.405 µg/L	R^2=0.99887, 65.179		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.793 Abs [0.8055] {2.2 CV}	0.440 µg/L [0.423] {5}	R^2=0.99887, 63.187		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.538 Abs	1.028 µg/L	R^2=0.99887, 42.869		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.555 Abs [0.5465] {2.2 CV}	0.965 µg/L [0.997] {4}	R^2=0.99887, 44.223		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.414 Abs	1.764 µg/L	R^2=0.99887, 32.988		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.400 Abs [0.4070] {2.4 CV}	1.902 µg/L [1.833] {5}	R^2=0.99887, 31.873		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.276 Abs	> 5.000 µg/L	21.992 %Abs		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.271 Abs [0.2735] {1.3 CV}	> 5.000 µg/L	21.594 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.151 Abs	0.088 µg/L	91.713 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.132 Abs [1.1415] {1.2 CV}	0.102 µg/L [0.095] {1}	90.199 %Abs [90.956]		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.928 Abs	0.278 µg/L	73.944 %Abs		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.868 Abs [0.8980] {4.7 CV}	0.343 µg/L [0.310] {1}	69.163 %Abs [71.554]		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.780 Abs	0.458 µg/L	62.151 %Abs		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.766 Abs [0.7730] {1.3 CV}	0.479 µg/L [0.469] {3}	61.036 %Abs [61.594]		19L2093

## Note

Signature

David Jordan

Date: 5/20/2020

# Test Report (by Request)

**Test Information**

Request: 5/20/2020 3:26:41 PM

Date: 5/20/2020 - 5/20/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
AB42361	MICROCYSTINS ADDA 546	1.134 Abs	0.101 µg/L	<b>LOW, 90.359 %ABS</b>	0.300 - 5.000	19L2093
AB42361	MICROCYSTINS ADDA 546	1.101 Abs [1.1175] {2.1 CV}	0.126 µg/L [0.113] {1}		0.300 - 5.000	19L2093
AB42361MS	MICROCYSTINS ADDA 546	0.776 Abs	0.464 µg/L	61.833 %Abs	0.300 - 5.000	19L2093
AB42361MS	MICROCYSTINS ADDA 546	0.759 Abs [0.7675] {1.6 CV}	0.490 µg/L [0.477] {3}	60.478 %Abs [61.155]	0.300 - 5.000	19L2093
AB42361MSD	MICROCYSTINS ADDA 546	0.749 Abs	0.506 µg/L	59.681 %Abs	0.300 - 5.000	19L2093
AB42361MSD	MICROCYSTINS ADDA 546	0.728 Abs [0.7385] {2.0 CV}	0.541 µg/L [0.523] {4}	58.008 %Abs [58.845]	0.300 - 5.000	19L2093
AB42362	MICROCYSTINS ADDA 546	1.191 Abs	0.058 µg/L	<b>LOW, 94.900 %ABS</b>	0.300 - 5.000	19L2093
AB42362	MICROCYSTINS ADDA 546	1.157 Abs [1.1740] {2.0 CV}	0.083 µg/L [0.071] {2}		0.300 - 5.000	19L2093
AB42363	MICROCYSTINS ADDA 546	1.166 Abs	0.077 µg/L	<b>LOW, 92.908 %ABS</b>	0.300 - 5.000	19L2093
AB42363	MICROCYSTINS ADDA 546	1.069 Abs [1.1175] {6.1 CV}	0.151 µg/L [0.114] {4}		0.300 - 5.000	19L2093
AB42364	MICROCYSTINS ADDA 546	1.175 Abs	0.070 µg/L	<b>LOW, 93.625 %ABS</b>	0.300 - 5.000	19L2093
AB42364	MICROCYSTINS ADDA 546	1.191 Abs [1.1830] {1.0 CV}	0.058 µg/L [0.064] {1}		0.300 - 5.000	19L2093
AB42365	MICROCYSTINS ADDA 546	1.084 Abs	0.139 µg/L	<b>LOW, 86.375 %ABS</b>	0.300 - 5.000	19L2093
AB42365	MICROCYSTINS ADDA 546	1.071 Abs [1.0775] {0.9 CV}	0.149 µg/L [0.144] {4}		0.300 - 5.000	19L2093
AB42366	MICROCYSTINS ADDA 546	1.179 Abs	0.067 µg/L	<b>LOW, 93.944 %ABS</b>	0.300 - 5.000	19L2093
AB42366	MICROCYSTINS ADDA 546	1.132 Abs [1.1555] {2.9 CV}	0.102 µg/L [0.084] {2}		0.300 - 5.000	19L2093
AB42367	MICROCYSTINS ADDA 546	1.082 Abs	0.141 µg/L	<b>LOW, 86.215 %ABS</b>	0.300 - 5.000	19L2093
AB42367	MICROCYSTINS ADDA 546	1.041 Abs [1.0615] {2.7 CV}	0.174 µg/L [0.157] {1}		0.300 - 5.000	19L2093
AB42368	MICROCYSTINS ADDA 546	1.140 Abs	0.096 µg/L	<b>LOW, 90.837 %ABS</b>	0.300 - 5.000	19L2093
AB42368	MICROCYSTINS ADDA 546	1.094 Abs [1.1170] {2.9 CV}	0.131 µg/L [0.113] {2}		0.300 - 5.000	19L2093
AB42369	MICROCYSTINS ADDA 546	1.153 Abs	0.086 µg/L	<b>LOW, 91.873 %ABS</b>	0.300 - 5.000	19L2093
AB42369	MICROCYSTINS ADDA 546	1.162 Abs [1.1575] {0.5 CV}	0.080 µg/L [0.083] {5}		0.300 - 5.000	19L2093
AB42370	MICROCYSTINS ADDA 546	1.179 Abs	0.067 µg/L	<b>LOW, 93.944 %ABS</b>	0.300 - 5.000	19L2093
AB42370	MICROCYSTINS ADDA 546	1.126 Abs [1.1525] {3.3 CV}	0.107 µg/L [0.087] {3}		0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.747 Abs	0.509 µg/L	59.522 %Abs	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.719 Abs [0.7330] {2.7 CV}	0.557 µg/L [0.533] {6}	57.291 %Abs [58.406]	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.251 Abs	0.010 µg/L	<b>LOW, 99.681 %ABS</b>	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.218 Abs [1.2345] {1.9 CV}	0.038 µg/L [0.024] {8}		0.300 - 5.000	19L2093

**Note**

 Signature *David Jordan*

Date: 5/20/2020

**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>5/20/2020 3:24:43 PM</b>				
MCT Std 0	1.257 Abs		R <sup>2</sup> =0.99887, 100.159 %Abs	RK1:23->A01@2
MCT Std 0	1.254 Abs [1.2555] {0.2 CV}		R <sup>2</sup> =0.99887, 100.000 %Abs	RK1:23->B01@2
MCT Std 1	1.077 Abs		R <sup>2</sup> =0.99887, 85.817 %Abs	RK1:24->C01@2
MCT Std 1	1.092 Abs [1.0845] {1.0 CV}		R <sup>2</sup> =0.99887, 87.012 %Abs	RK1:24->D01@2
MCT Std 2	0.818 Abs		R <sup>2</sup> =0.99887, 65.179 %Abs	RK1:25->E01@2
MCT Std 2	0.793 Abs [0.8055] {2.2 CV}		R <sup>2</sup> =0.99887, 63.187 %Abs	RK1:25->F01@3
MCT Std 3	0.538 Abs		R <sup>2</sup> =0.99887, 42.869 %Abs	RK1:26->G01@3
MCT Std 3	0.555 Abs [0.5465] {2.2 CV}		R <sup>2</sup> =0.99887, 44.223 %Abs	RK1:26->H01@3
MCT Std 4	0.414 Abs		R <sup>2</sup> =0.99887, 32.988 %Abs	RK1:27->A02@2
MCT Std 4	0.400 Abs [0.4070] {2.4 CV}		R <sup>2</sup> =0.99887, 31.873 %Abs	RK1:27->B02@2
MCT Std 5	0.276 Abs		21.992 %Abs	RK1:28->C02@2
MCT Std 5	0.271 Abs [0.2735] {1.3 CV}		21.594 %Abs	RK1:28->D02@2
*****				
<b>5/20/2020 3:24:43 PM</b>				
MCT 546 LRB 1	1.151 Abs		91.713 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.132 Abs [1.1415] {1.2 CV}		90.199 %Abs [90.956 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	0.928 Abs		73.944 %Abs	RK1:30->G02@3
MCT 546 Low-CV	0.868 Abs [0.8980] {4.7 CV}		69.163 %Abs [71.554 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.780 Abs		62.151 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.766 Abs [0.7730] {1.3 CV}		61.036 %Abs [61.594 %Abs]	RK1:31->B03@2
*****				
<b>Statistic</b>				
MCT Std 0 [MEAN]	1.2555			
MCT Std 0 [SD]	0.0021			
MCT Std 0 [%CV]	0.1690			
MCT Std 1 [MEAN]	1.0845			
MCT Std 1 [SD]	0.0106			
MCT Std 1 [%CV]	0.9780			
MCT Std 1 [%DIFF]				
MCT Std 2 [MEAN]	0.8055			
MCT Std 2 [SD]	0.0177			
MCT Std 2 [%CV]	2.1946			
MCT Std 2 [%DIFF]				
MCT Std 3 [MEAN]	0.5465			
MCT Std 3 [SD]	0.0120			
MCT Std 3 [%CV]	2.1996			
MCT Std 3 [%DIFF]				
MCT Std 4 [MEAN]	0.4070			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0099			
MCT Std 4 [%CV]	2.4323			
MCT Std 4 [%DIFF]				
MCT Std 5 [MEAN]	0.2735			
MCT Std 5 [SD]	0.0035			
MCT Std 5 [%CV]	1.2927			
MCT 546 LRB 1 [MEAN]	1.1415			
MCT 546 LRB 1 [SD]	0.0134			
MCT 546 LRB 1 [%CV]	1.1770			
MCT 546 Low-CV [MEAN]	0.8980			
MCT 546 Low-CV [SD]	0.0424			
MCT 546 Low-CV [%CV]	4.7245			
MCT 546 LFB 1 [MEAN]	0.7730			
MCT 546 LFB 1 [SD]	0.0099			
MCT 546 LFB 1 [%CV]	1.2807			

**Assay Curve**

$y = (A-D)/(1+(x/C)^B) + D$   
 Weight: NONE  
 A = 1.2599  
 B = 1.2045  
 C = 0.52187  
 D = 0.21896  
 R2 coef = 0.99887  
 50% = 0.750

