



Microcystins Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ug/L)
AB42857	Summit Lake - State Park	6/8/2020	6/11/2020	< 0.30
AB42858	Kunkel Beach @ Oubache State Park	6/8/2020	6/11/2020	< 0.30
AB42859	Pokagon State Park	6/8/2020	6/11/2020	< 0.30
AB42860	Potowatomi Inn's Beach	6/8/2020	6/11/2020	< 0.30
AB42861	Chain O'Lakes SP	6/8/2020	6/11/2020	< 0.30
AB42862	Potato Creek State Park	6/9/2020	6/11/2020	< 0.30
AB42863	Lost Bridge West SRA	6/9/2020	6/11/2020	< 0.30
AB42864	Mississinewa Lake Miami SRA	6/9/2020	6/11/2020	< 0.30
AB42865	Field Blank	6/9/2020	6/11/2020	< 0.30
AB42866	Lost Bridge West SRA (Field Duplicate)	6/9/2020	6/11/2020	< 0.30

Test Report (by Request)

Test Information

Request: 6/11/2020 11:56:41 AM

Date: 6/11/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
MCT Std 0	MICROCYSTINS ADDA 546	1.637 Abs	0.000 µg/L	R ² =0.99733, 100.80		19L2093
MCT Std 0	MICROCYSTINS ADDA 546	1.611 Abs [1.6240] {1.1 CV}	0.019 µg/L [0.009] {1}	R ² =0.99733, 99.200		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.446 Abs	0.126 µg/L	R ² =0.99733, 89.039		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.426 Abs [1.4360] {1.0 CV}	0.140 µg/L [0.133] {7}	R ² =0.99733, 87.808		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	1.090 Abs	0.419 µg/L	R ² =0.99733, 67.118		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	1.079 Abs [1.0845] {0.7 CV}	0.431 µg/L [0.425] {2}	R ² =0.99733, 66.441		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.743 Abs	1.031 µg/L	R ² =0.99733, 45.751		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.743 Abs [0.7430] {0.0 CV}	1.031 µg/L [1.031] {0}	R ² =0.99733, 45.751		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.609 Abs	1.577 µg/L	R ² =0.99733, 37.500		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.563 Abs [0.5860] {5.6 CV}	1.880 µg/L [1.729] {1}	R ² =0.99733, 34.667		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.388 Abs	> 5.000 µg/L	23.892 %Abs		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.372 Abs [0.3800] {3.0 CV}	> 5.000 µg/L	22.906 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.557 Abs	0.055 µg/L	95.874 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.516 Abs [1.5365] {1.9 CV}	0.082 µg/L [0.068] {2}	93.350 %Abs [94.612]		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	1.175 Abs	0.334 µg/L	72.352 %Abs		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	1.127 Abs [1.1510] {2.9 CV}	0.380 µg/L [0.357] {9}	69.397 %Abs [70.874]		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	1.058 Abs	0.455 µg/L	65.148 %Abs		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	1.044 Abs [1.0510] {0.9 CV}	0.472 µg/L [0.464] {2}	64.286 %Abs [64.717]		19L2093

Note

 Signature *David Jordan*

Date: 6/11/2020

Test Report (by Request)

Test Information

Request: 6/11/2020 11:57:31 AM

Date: 6/11/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
AB42857	MICROCYSTINS ADDA 546	1.575 Abs	0.044 µg/L	LOW, 96.983 %ABS	0.300 - 5.000	19L2093
AB42857	MICROCYSTINS ADDA 546	1.537 Abs [1.5560] {1.7 CV}	0.068 µg/L [0.056] {3.5}	LOW, 94.643 %ABS	0.300 - 5.000	19L2093
AB42857MS	MICROCYSTINS ADDA 546	0.939 Abs	0.614 µg/L	57.820 %Abs	0.300 - 5.000	19L2093
AB42857MS	MICROCYSTINS ADDA 546	0.906 Abs [0.9225] {2.5 CV}	0.668 µg/L [0.641] {6.0}	55.788 %Abs [56.804]	0.300 - 5.000	19L2093
AB42857MSD	MICROCYSTINS ADDA 546	0.921 Abs	0.643 µg/L	56.712 %Abs	0.300 - 5.000	19L2093
AB42857MSD	MICROCYSTINS ADDA 546	0.891 Abs [0.9060] {2.3 CV}	0.694 µg/L [0.669] {5.0}	54.865 %Abs [55.788]	0.300 - 5.000	19L2093
AB42858	MICROCYSTINS ADDA 546	1.602 Abs	0.026 µg/L	LOW, 98.645 %ABS	0.300 - 5.000	19L2093
AB42858	MICROCYSTINS ADDA 546	1.579 Abs [1.5905] {1.0 CV}	0.041 µg/L [0.034] {3.0}	LOW, 97.229 %ABS	0.300 - 5.000	19L2093
AB42859	MICROCYSTINS ADDA 546	1.567 Abs	0.049 µg/L	LOW, 96.490 %ABS	0.300 - 5.000	19L2093
AB42859	MICROCYSTINS ADDA 546	1.547 Abs [1.5570] {0.9 CV}	0.062 µg/L [0.056] {1.0}	LOW, 95.259 %ABS	0.300 - 5.000	19L2093
AB42860	MICROCYSTINS ADDA 546	1.548 Abs	0.061 µg/L	LOW, 95.320 %ABS	0.300 - 5.000	19L2093
AB42860	MICROCYSTINS ADDA 546	1.518 Abs [1.5330] {1.4 CV}	0.080 µg/L [0.071] {1.0}	LOW, 93.473 %ABS	0.300 - 5.000	19L2093
AB42861	MICROCYSTINS ADDA 546	1.455 Abs	0.121 µg/L	LOW, 89.594 %ABS	0.300 - 5.000	19L2093
AB42861	MICROCYSTINS ADDA 546	1.416 Abs [1.4355] {1.9 CV}	0.146 µg/L [0.133] {1.0}	LOW, 87.192 %ABS	0.300 - 5.000	19L2093
AB42862	MICROCYSTINS ADDA 546	1.530 Abs	0.073 µg/L	LOW, 94.212 %ABS	0.300 - 5.000	19L2093
AB42862	MICROCYSTINS ADDA 546	1.536 Abs [1.5330] {0.3 CV}	0.069 µg/L [0.071] {4.0}	LOW, 94.581 %ABS	0.300 - 5.000	19L2093
AB42863	MICROCYSTINS ADDA 546	1.561 Abs	0.053 µg/L	LOW, 96.121 %ABS	0.300 - 5.000	19L2093
AB42863	MICROCYSTINS ADDA 546	1.533 Abs [1.5470] {1.3 CV}	0.071 µg/L [0.062] {2.0}	LOW, 94.397 %ABS	0.300 - 5.000	19L2093
AB42864	MICROCYSTINS ADDA 546	1.508 Abs	0.087 µg/L	LOW, 92.857 %ABS	0.300 - 5.000	19L2093
AB42864	MICROCYSTINS ADDA 546	1.474 Abs [1.4910] {1.6 CV}	0.108 µg/L [0.097] {1.0}	LOW, 90.764 %ABS	0.300 - 5.000	19L2093
AB42865	MICROCYSTINS ADDA 546	1.516 Abs	0.082 µg/L	LOW, 93.350 %ABS	0.300 - 5.000	19L2093
AB42865	MICROCYSTINS ADDA 546	1.414 Abs [1.4650] {4.9 CV}	0.148 µg/L [0.115] {4.0}	LOW, 87.069 %ABS	0.300 - 5.000	19L2093
AB42866	MICROCYSTINS ADDA 546	1.592 Abs	0.033 µg/L	LOW, 98.030 %ABS	0.300 - 5.000	19L2093
AB42866	MICROCYSTINS ADDA 546	1.580 Abs [1.5860] {0.5 CV}	0.041 µg/L [0.037] {1.0}	LOW, 97.291 %ABS	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	1.046 Abs	0.469 µg/L	64.409 %Abs	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	1.019 Abs [1.0325] {1.8 CV}	0.502 µg/L [0.485] {4.0}	62.746 %Abs [63.578]	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.557 Abs	0.055 µg/L	LOW, 95.874 %ABS	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.522 Abs [1.5395] {1.6 CV}	0.078 µg/L [0.067] {2.0}	LOW, 93.719 %ABS	0.300 - 5.000	19L2093
QCS	MICROCYSTINS ADDA 546	0.915 Abs	0.653 µg/L	56.342 %Abs	0.300 - 5.000	19L2093
QCS	MICROCYSTINS ADDA 546	0.845 Abs [0.8800] {5.6 CV}	0.781 µg/L [0.717] {1.0}	52.032 %Abs [54.181]	0.300 - 5.000	19L2093

Note

 Signature *David Jordan*

Date: 6/11/2020

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
6/11/2020 11:56:41 AM				
MCT Std 0	1.637 Abs		R ² =0.99733, 100.800 %Abs	RK1:23->A01@2
MCT Std 0	1.611 Abs [1.6240] {1.1 CV}		R ² =0.99733, 99.200 %Abs	RK1:23->B01@2
MCT Std 1	1.446 Abs		R ² =0.99733, 89.039 %Abs	RK1:24->C01@2
MCT Std 1	1.426 Abs [1.4360] {1.0 CV}		R ² =0.99733, 87.808 %Abs	RK1:24->D01@2
MCT Std 2	1.090 Abs		R ² =0.99733, 67.118 %Abs	RK1:25->E01@2
MCT Std 2	1.079 Abs [1.0845] {0.7 CV}		R ² =0.99733, 66.441 %Abs	RK1:25->F01@3
MCT Std 3	0.743 Abs		R ² =0.99733, 45.751 %Abs	RK1:26->G01@3
MCT Std 3	0.743 Abs [0.7430] {0.0 CV}		R ² =0.99733, 45.751 %Abs	RK1:26->H01@3
MCT Std 4	0.609 Abs		R ² =0.99733, 37.500 %Abs	RK1:27->A02@2
MCT Std 4	0.563 Abs [0.5860] {5.6 CV}		R ² =0.99733, 34.667 %Abs	RK1:27->B02@2
MCT Std 5	0.388 Abs		23.892 %Abs	RK1:28->C02@2
MCT Std 5	0.372 Abs [0.3800] {3.0 CV}		22.906 %Abs	RK1:28->D02@2

6/11/2020 11:56:41 AM				
MCT 546 LRB 1	1.557 Abs		95.874 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.516 Abs [1.5365] {1.9 CV}		93.350 %Abs [94.612 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	1.175 Abs		72.352 %Abs	RK1:30->G02@3
MCT 546 Low-CV	1.127 Abs [1.1510] {2.9 CV}		69.397 %Abs [70.874 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	1.058 Abs		65.148 %Abs	RK1:31->A03@2
MCT 546 LFB 1	1.044 Abs [1.0510] {0.9 CV}		64.286 %Abs [64.717 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.6240			
MCT Std 0 [SD]	0.0184			
MCT Std 0 [%CV]	1.1321			
MCT Std 1 [MEAN]	1.4360			
MCT Std 1 [SD]	0.0141			
MCT Std 1 [%CV]	0.9848			
MCT Std 1 [%DIFF]				
MCT Std 2 [MEAN]	1.0845			
MCT Std 2 [SD]	0.0078			
MCT Std 2 [%CV]	0.7172			
MCT Std 2 [%DIFF]				
MCT Std 3 [MEAN]	0.7430			
MCT Std 3 [SD]	0.0000			
MCT Std 3 [%CV]	0.0000			
MCT Std 3 [%DIFF]				
MCT Std 4 [MEAN]	0.5860			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0325			
MCT Std 4 [%CV]	5.5507			
MCT Std 4 [%DIFF]				
MCT Std 5 [MEAN]	0.3800			
MCT Std 5 [SD]	0.0113			
MCT Std 5 [%CV]	2.9773			
MCT 546 LRB 1 [MEAN]	1.5365			
MCT 546 LRB 1 [SD]	0.0290			
MCT 546 LRB 1 [%CV]	1.8868			
MCT 546 Low-CV [MEAN]	1.1510			
MCT 546 Low-CV [SD]	0.0339			
MCT 546 Low-CV [%CV]	2.9488			
MCT 546 LFB 1 [MEAN]	1.0510			
MCT 546 LFB 1 [SD]	0.0099			
MCT 546 LFB 1 [%CV]	0.9419			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.6333
 B = 1.2036
 C = 0.56516
 D = 0.31114
 R2 coef = 0.99733
 50% = 0.852

