



Microcystins Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ug/L)	% Recovery
MCT 546 LRB 1	Lab Reagent Blank	6/18/2019	6/19/2019	< 0.30	
MCT 546 LFB 1	Lab Fortified Blank (True value = 0.600)	6/18/2019	6/19/2019	0.65	108
AB39228	Pokagon State Park	6/17/2019	6/19/2019	< 0.30	
AB39229	Potawatomi Inn's Beach	6/17/2019	6/19/2019	< 0.30	
AB39230	Chain O'Lakes S P	6/17/2019	6/19/2019	< 0.30	
AB39231	Kunkel Beach @ Ouabache State Park	6/17/2019	6/19/2019	< 0.30	
AB39232	Potato Creek State Park	6/17/2019	6/19/2019	< 0.30	
AB39232MS	Potato Creek State Park (Matrix S pk.)	6/17/2019	6/19/2019	0.66	98
AB39232MS D	Potato Creek State Park (Matrix S pk. Dup.)	6/17/2019	6/19/2019	0.91	140
AB39233	Starve Hollow S R A	6/17/2019	6/19/2019	< 0.30	
AB39233	Mississinewa Lake Miami S R A	6/17/2019	6/19/2019	< 0.30	
AB39234	Lost Bridge West S R A	6/17/2019	6/19/2019	< 0.30	
AB39235	Field Blank	6/17/2019	6/19/2019	< 0.30	
AB39236	Kunkel Beach @ Ouabache State Park (Field Dup.)	6/17/2019	6/19/2019	< 0.30	
AB39237	Mississinewa Lake Miami S R A	6/17/2019	6/19/2019	< 0.30	
AB39238	Field Blank	6/17/2019	6/19/2019	< 0.30	
MCT 546 LFB 2	Lab Fortified Blank (True value = 0.600)	6/18/2019	6/19/2019	0.59	99
MCT 546 LRB 2	Lab Reagent Blank	6/18/2019	6/19/2019	< 0.30	

Test Information

Request: 6/19/2019 8:35:41 AM
Date: 6/19/2019 - 6/19/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
MCT Std 0	MICROCYSTINS ADDA 546	1.280 Abs	0.000 µg/L	R^2=0.99855	0.000
MCT Std 0	MICROCYSTINS ADDA 546	1.133 Abs [1.2065] {8.6 CV}	0.040 µg/L [0.020] {141.1}	R^2=0.99855	0.000
MCT Std 1	MICROCYSTINS ADDA 546	1.011 Abs	0.126 µg/L	R^2=0.99855	0.150
MCT Std 1	MICROCYSTINS ADDA 546	0.982 Abs [0.9965] {2.1 CV}	0.151 µg/L [0.139] {12.8}	R^2=0.99855	0.150
MCT Std 2	MICROCYSTINS ADDA 546	0.761 Abs	0.425 µg/L	R^2=0.99855	0.400
MCT Std 2	MICROCYSTINS ADDA 546	0.757 Abs [0.7590] {0.4 CV}	0.432 µg/L [0.428] {1.2}	R^2=0.99855	0.400
MCT Std 3	MICROCYSTINS ADDA 546	0.541 Abs	1.025 µg/L	R^2=0.99855	1.000
MCT Std 3	MICROCYSTINS ADDA 546	0.546 Abs [0.5435] {0.7 CV}	1.004 µg/L [1.014] {1.5}	R^2=0.99855	1.000
MCT Std 4	MICROCYSTINS ADDA 546	0.419 Abs	1.781 µg/L	R^2=0.99855	2.000
MCT Std 4	MICROCYSTINS ADDA 546	0.411 Abs [0.4150] {1.4 CV}	1.855 µg/L [1.818] {2.9}	R^2=0.99855	2.000
MCT Std 5	MICROCYSTINS ADDA 546	0.251 Abs	> 5.000 µg/L		5.000
MCT Std 5	MICROCYSTINS ADDA 546	0.253 Abs [0.2520] {0.6 CV}	> 5.000 µg/L		5.000
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.195 Abs	0.007 µg/L		
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.169 Abs [1.1820] {1.6 CV}	0.020 µg/L [0.013] {68.1}		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.816 Abs	0.339 µg/L		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.695 Abs [0.7555] {11.3 CV}	0.554 µg/L [0.447] {34.0}		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.647 Abs	0.669 µg/L		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.664 Abs [0.6555] {1.8 CV}	0.625 µg/L [0.647] {4.8}		
AB39228	MICROCYSTINS ADDA 546	1.020 Abs	0.118 µg/L	LOW	0.300 - 5
AB39228	MICROCYSTINS ADDA 546	1.172 Abs [1.0960] {9.8 CV}	0.018 µg/L [0.068] {104.1}	LOW [LOW]	0.300 - 5
AB39229	MICROCYSTINS ADDA 546	1.165 Abs	0.022 µg/L	LOW	0.300 - 5
AB39229	MICROCYSTINS ADDA 546	1.099 Abs [1.1320] {4.1 CV}	0.061 µg/L [0.042] {66.5}	LOW [LOW]	0.300 - 5
AB39230	MICROCYSTINS ADDA 546	1.115 Abs	0.051 µg/L	LOW	0.300 - 5
AB39230	MICROCYSTINS ADDA 546	1.084 Abs [1.0995] {2.0 CV}	0.071 µg/L [0.061] {23.2}	LOW [LOW]	0.300 - 5
AB39231	MICROCYSTINS ADDA 546	1.264 Abs	0.000 µg/L	LOW	0.300 - 5
AB39231	MICROCYSTINS ADDA 546	1.159 Abs [1.2115] {6.1 CV}	0.025 µg/L [0.013] {141.1}	LOW [LOW]	0.300 - 5
AB39232	MICROCYSTINS ADDA 546	1.122 Abs	0.047 µg/L	LOW	0.300 - 5
AB39232	MICROCYSTINS ADDA 546	1.063 Abs [1.0925] {3.8 CV}	0.086 µg/L [0.067] {41.5}	LOW [LOW]	0.300 - 5
AB39232MS	MICROCYSTINS ADDA 546	0.653 Abs	0.653 µg/L		0.300 - 5
AB39232MS	MICROCYSTINS ADDA 546	0.652 Abs [0.6525] {0.1 CV}	0.656 µg/L [0.655] {0.3}		0.300 - 5
AB39232MSD	MICROCYSTINS ADDA 546	0.543 Abs	1.017 µg/L		0.300 - 5
AB39232MSD	MICROCYSTINS ADDA 546	0.604 Abs [0.5735] {7.5 CV}	0.793 µg/L [0.905] {17.5}		0.300 - 5
AB39233	MICROCYSTINS ADDA 546	0.967 Abs	0.164 µg/L	LOW	0.300 - 5
AB39233	MICROCYSTINS ADDA 546	1.165 Abs [1.0660] {13.1 CV}	0.022 µg/L [0.093] {108.1}	LOW [LOW]	0.300 - 5
AB39234	MICROCYSTINS ADDA 546	1.185 Abs	0.012 µg/L	LOW	0.300 - 5
AB39234	MICROCYSTINS ADDA 546	1.191 Abs [1.1880] {0.4 CV}	0.009 µg/L [0.010] {20.2}	LOW [LOW]	0.300 - 5
AB39235	MICROCYSTINS ADDA 546	1.168 Abs	0.020 µg/L	LOW	0.300 - 5
AB39235	MICROCYSTINS ADDA 546	1.151 Abs [1.1595] {1.0 CV}	0.030 µg/L [0.025] {28.3}	LOW [LOW]	0.300 - 5
AB39236	MICROCYSTINS ADDA 546	1.093 Abs	0.065 µg/L	LOW	0.300 - 5
AB39236	MICROCYSTINS ADDA 546	1.115 Abs [1.1040] {1.4 CV}	0.051 µg/L [0.058] {17.1}	LOW [LOW]	0.300 - 5
AB39237	MICROCYSTINS ADDA 546	1.114 Abs	0.052 µg/L	LOW	0.300 - 5
AB39237	MICROCYSTINS ADDA 546	1.202 Abs [1.1580] {5.4 CV}	0.004 µg/L [0.028] {121.1}	LOW [LOW]	0.300 - 5
AB39238	MICROCYSTINS ADDA 546	1.225 Abs	0.000 µg/L	LOW	0.300 - 5
AB39238	MICROCYSTINS ADDA 546	1.251 Abs [1.2380] {1.5 CV}	0.000 µg/L [0.000]	LOW [LOW]	0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	0.687 Abs	0.571 µg/L		0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	0.670 Abs [0.6785] {1.8 CV}	0.611 µg/L [0.591] {4.8}		0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.214 Abs	0.000 µg/L	LOW	0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.209 Abs [1.2115] {0.3 CV}	0.001 µg/L [0.001] {141.1}	LOW [LOW]	0.300 - 5



Test Report (by Request)

Note

Signature David Jordan
Date: 6/19/2019

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests
* Generated by software version (6.4.1.943/1085/1.00/0.95) 6/19/2019 1:01:57 PM



MICROCYSTINS ADDA 546 - Assay Calibration Report

Assay Information

Assay Name: MICROCYSTINS ADDA 546
Version: 1
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: 7 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: 5/9/2019 11:43:40 AM
Normal: 0.300 - 5.000
of decimals: 3

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
6/19/2019 8:35:41 AM					
MCT Std 0	1.280 Abs	0.000 µg/L	R^2=0.99855	RK1:23->A01@2	
MCT Std 0	1.133 Abs [1.2065] {8.6 CV}	0.040 µg/L [0.020] {141.4 CV}	R^2=0.99855	RK1:23->B01@2	
MCT Std 1	1.011 Abs	0.126 µg/L	R^2=0.99855	RK1:24->C01@2	
MCT Std 1	0.982 Abs [0.9965] {2.1 CV}	0.151 µg/L [0.139] {12.8 CV}	R^2=0.99855	RK1:24->D01@2	
MCT Std 2	0.761 Abs	0.425 µg/L	R^2=0.99855	RK1:25->E01@2	
MCT Std 2	0.757 Abs [0.7590] {0.4 CV}	0.432 µg/L [0.428] {1.2 CV}	R^2=0.99855	RK1:25->F01@3	
MCT Std 3	0.541 Abs	1.025 µg/L	R^2=0.99855	RK1:26->G01@3	
MCT Std 3	0.546 Abs [0.5435] {0.7 CV}	1.004 µg/L [1.014] {1.5 CV}	R^2=0.99855	RK1:26->H01@3	
MCT Std 4	0.419 Abs	1.781 µg/L	R^2=0.99855	RK1:27->A02@2	
MCT Std 4	0.411 Abs [0.4150] {1.4 CV}	1.855 µg/L [1.818] {2.9 CV}	R^2=0.99855	RK1:27->B02@2	
MCT Std 5	0.251 Abs	> 5.000 µg/L		RK1:28->C02@2	
MCT Std 5	0.253 Abs [0.2520] {0.6 CV}	> 5.000 µg/L		RK1:28->D02@2	
*****	*****	*****	*****	*****	*****
6/19/2019 8:35:41 AM					
MCT 546 LRB 1	1.195 Abs	0.007 µg/L		RK1:29->E02@2	
MCT 546 LRB 1	1.169 Abs [1.1820] {1.6 CV}	0.020 µg/L [0.013] {68.1 CV}		RK1:29->F02@3	
MCT 546 Low-CV	0.816 Abs	0.339 µg/L		RK1:30->G02@3	
MCT 546 Low-CV	0.695 Abs [0.7555] {11.3 CV}	0.554 µg/L [0.447] {34.0 CV}		RK1:30->H02@3	
MCT 546 LFB 1	0.647 Abs	0.669 µg/L		RK1:31->A03@2	
MCT 546 LFB 1	0.664 Abs [0.6555] {1.8 CV}	0.625 µg/L [0.647] {4.8 CV}		RK1:31->B03@2	
*****	*****	*****	*****	*****	*****
Statistic					
MCT Std 0 [MEAN]	1.2065	0.0200			
MCT Std 0 [SD]	0.1039	0.0283			
MCT Std 0 [%CV]	8.6154	141.4214			
MCT Std 1 [MEAN]	0.9965	0.1385			
MCT Std 1 [SD]	0.0205	0.0177			
MCT Std 1 [%CV]	2.0578	12.7637			
MCT Std 1 [%DIFF]		-7.6667			
MCT Std 2 [MEAN]	0.7590	0.4285			
MCT Std 2 [SD]	0.0028	0.0049			
MCT Std 2 [%CV]	0.3726	1.1551			
MCT Std 2 [%DIFF]		7.1250			
MCT Std 3 [MEAN]	0.5435	1.0145			
MCT Std 3 [SD]	0.0035	0.0148			
MCT Std 3 [%CV]	0.6505	1.4637			
MCT Std 3 [%DIFF]		1.4500			
MCT Std 4 [MEAN]	0.4150	1.8180			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0057	0.0523		
MCT Std 4 [%CV]	1.3631	2.8782		
MCT Std 4 [%DIFF]		-9.1000		
MCT Std 5 [MEAN]	0.2520			
MCT Std 5 [SD]	0.0014			
MCT Std 5 [%CV]	0.5612			
MCT 546 LRB 1 [MEAN]	1.1820	0.0135		
MCT 546 LRB 1 [SD]	0.0184	0.0092		
MCT 546 LRB 1 [%CV]	1.5554	68.0918		
MCT 546 Low-CV [MEAN]	0.7555	0.4465		
MCT 546 Low-CV [SD]	0.0856	0.1520		
MCT 546 Low-CV [%CV]	11.3249	34.0488		
MCT 546 LFB 1 [MEAN]	0.6555	0.6470		
MCT 546 LFB 1 [SD]	0.0120	0.0311		
MCT 546 LFB 1 [%CV]	1.8338	4.8088		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
Weight: NONE
A = 1.2094
B = 0.94451
C = 0.60819
D = 0.13191
R2 coef = 0.99853

