



## 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	6/26/2019	6/26/2019	< 0.30	
MCT 546 LFB 1	Lab Fortified Blank (True value = 0.600)	6/26/2019	6/26/2019	0.62	104
AB39444	Quakertown S R A	6/24/2019	6/26/2019	< 0.30	
AB39445	Raccoon Lake S R A	6/24/2019	6/26/2019	< 0.30	
AB39446	Whitewater Memorial S P	6/24/2019	6/26/2019	< 0.30	
AB39446MS	Whitewater (Matrix Spike, True Value = 0.60)	6/26/2019	6/26/2019	0.61	102
AB39446MS D	Whitewater (Matrix Spike Duplicate, True Value = 0.60)	6/26/2019	6/26/2019	0.53	89
AB39447	Hardy Lake S R A	6/24/2019	6/26/2019	< 0.30	
AB39448	Raccoon Lake (Field Duplicate)	6/24/2019	6/26/2019	< 0.30	
AB39449	Field Blank	6/24/2019	6/26/2019	< 0.30	
MCT 546 LFB 2	Lab Fortified Blank (True value = 0.600)	6/26/2019	6/26/2019	0.54	91
MCT 546 LRB 2	Lab Reagent Blank	6/26/2019	6/26/2019	< 0.30	

## Test Information

Request: 6/26/2019 5:19:19 PM  
Date: 6/26/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
MCT Std 0	MICROCYSTINS ADDA 546	1.309 Abs	0.000 µg/L	R^2=0.99785	0.000
MCT Std 0	MICROCYSTINS ADDA 546	1.130 Abs [1.2195] {10.4 CV}	0.081 µg/L [0.041] {141.1}	R^2=0.99785	0.000
MCT Std 1	MICROCYSTINS ADDA 546	1.063 Abs	0.137 µg/L	R^2=0.99785	0.150
MCT Std 1	MICROCYSTINS ADDA 546	1.077 Abs [1.0700] {0.9 CV}	0.125 µg/L [0.131] {6.5}	R^2=0.99785	0.150
MCT Std 2	MICROCYSTINS ADDA 546	0.802 Abs	0.432 µg/L	R^2=0.99785	0.400
MCT Std 2	MICROCYSTINS ADDA 546	0.791 Abs [0.7965] {1.0 CV}	0.448 µg/L [0.440] {2.6}	R^2=0.99785	0.400
MCT Std 3	MICROCYSTINS ADDA 546	0.577 Abs	0.934 µg/L	R^2=0.99785	1.000
MCT Std 3	MICROCYSTINS ADDA 546	0.569 Abs [0.5730] {1.0 CV}	0.962 µg/L [0.948] {2.1}	R^2=0.99785	1.000
MCT Std 4	MICROCYSTINS ADDA 546	0.403 Abs	1.940 µg/L	R^2=0.99785	2.000
MCT Std 4	MICROCYSTINS ADDA 546	0.400 Abs [0.4015] {0.5 CV}	1.970 µg/L [1.955] {1.1}	R^2=0.99785	2.000
MCT Std 5	MICROCYSTINS ADDA 546	0.273 Abs	> 5.000 µg/L		5.000
MCT Std 5	MICROCYSTINS ADDA 546	0.263 Abs [0.2680] {2.6 CV}	> 5.000 µg/L		5.000
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.209 Abs	0.017 µg/L		
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.157 Abs [1.1830] {3.1 CV}	0.059 µg/L [0.038] {78.2}		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.857 Abs	0.355 µg/L		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.785 Abs [0.8210] {6.2 CV}	0.458 µg/L [0.406] {17.9}		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.695 Abs	0.621 µg/L		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.695 Abs [0.6950] {0.0 CV}	0.621 µg/L [0.621] {0.0}		
AB39444	MICROCYSTINS ADDA 546	1.334 Abs	0.000 µg/L	LOW	0.300 - 5
AB39444	MICROCYSTINS ADDA 546	1.322 Abs [1.3280] {0.6 CV}	0.000 µg/L [0.000]	LOW [LOW]	0.300 - 5
AB39445	MICROCYSTINS ADDA 546	1.148 Abs	0.067 µg/L	LOW	0.300 - 5
AB39445	MICROCYSTINS ADDA 546	1.182 Abs [1.1650] {2.1 CV}	0.039 µg/L [0.053] {37.4}	LOW [LOW]	0.300 - 5
AB39446	MICROCYSTINS ADDA 546	1.260 Abs	0.000 µg/L	LOW	0.300 - 5
AB39446	MICROCYSTINS ADDA 546	1.267 Abs [1.2635] {0.4 CV}	0.000 µg/L [0.000]	LOW [LOW]	0.300 - 5
AB39446MS	MICROCYSTINS ADDA 546	0.691 Abs	0.630 µg/L		0.300 - 5
AB39446MS	MICROCYSTINS ADDA 546	0.712 Abs [0.7015] {2.1 CV}	0.587 µg/L [0.609] {5.0}		0.300 - 5
AB39446MSD	MICROCYSTINS ADDA 546	0.728 Abs	0.556 µg/L		0.300 - 5
AB39446MSD	MICROCYSTINS ADDA 546	0.752 Abs [0.7400] {2.3 CV}	0.512 µg/L [0.534] {5.8}		0.300 - 5
AB39447	MICROCYSTINS ADDA 546	1.153 Abs	0.063 µg/L	LOW	0.300 - 5
AB39447	MICROCYSTINS ADDA 546	1.130 Abs [1.1415] {1.4 CV}	0.081 µg/L [0.072] {17.7}	LOW [LOW]	0.300 - 5
AB39448	MICROCYSTINS ADDA 546	1.184 Abs	0.038 µg/L	LOW	0.300 - 5
AB39448	MICROCYSTINS ADDA 546	1.144 Abs [1.1640] {2.4 CV}	0.070 µg/L [0.054] {41.9}	LOW [LOW]	0.300 - 5
AB39449	MICROCYSTINS ADDA 546	1.287 Abs	0.000 µg/L	LOW	0.300 - 5
AB39449	MICROCYSTINS ADDA 546	1.224 Abs [1.2555] {3.5 CV}	0.003 µg/L [0.002] {141.1}	LOW [LOW]	0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	0.733 Abs	0.546 µg/L		0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	0.737 Abs [0.7350] {0.4 CV}	0.539 µg/L [0.543] {0.9}		0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.299 Abs	0.000 µg/L	LOW	0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.225 Abs [1.2620] {4.1 CV}	0.002 µg/L [0.001] {141.1}	LOW [LOW]	0.300 - 5

## Note

Signature

David Jordan

Date: 6/26/2019



# 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
6/26/2019 5:19:19 PM				
MCT Std 0	1.309 Abs	0.000 µg/L	R <sup>2</sup> =0.99785	RK1:23->A01@2
MCT Std 0	1.130 Abs [1.2195] {10.4 CV}	0.081 µg/L [0.041] {141.4 CV}	R <sup>2</sup> =0.99785	RK1:23->B01@2
MCT Std 1	1.063 Abs	0.137 µg/L	R <sup>2</sup> =0.99785	RK1:24->C01@2
MCT Std 1	1.077 Abs [1.0700] {0.9 CV}	0.125 µg/L [0.131] {6.5 CV}	R <sup>2</sup> =0.99785	RK1:24->D01@2
MCT Std 2	0.802 Abs	0.432 µg/L	R <sup>2</sup> =0.99785	RK1:25->E01@2
MCT Std 2	0.791 Abs [0.7965] {1.0 CV}	0.448 µg/L [0.440] {2.6 CV}	R <sup>2</sup> =0.99785	RK1:25->F01@3
MCT Std 3	0.577 Abs	0.934 µg/L	R <sup>2</sup> =0.99785	RK1:26->G01@3
MCT Std 3	0.569 Abs [0.5730] {1.0 CV}	0.962 µg/L [0.948] {2.1 CV}	R <sup>2</sup> =0.99785	RK1:26->H01@3
MCT Std 4	0.403 Abs	1.940 µg/L	R <sup>2</sup> =0.99785	RK1:27->A02@2
MCT Std 4	0.400 Abs [0.4015] {0.5 CV}	1.970 µg/L [1.955] {1.1 CV}	R <sup>2</sup> =0.99785	RK1:27->B02@2
MCT Std 5	0.273 Abs	> 5.000 µg/L		RK1:28->C02@2
MCT Std 5	0.263 Abs [0.2680] {2.6 CV}	> 5.000 µg/L		RK1:28->D02@2
*****				
6/26/2019 5:19:19 PM				
MCT 546 LRB 1	1.209 Abs	0.017 µg/L		RK1:29->E02@2
MCT 546 LRB 1	1.157 Abs [1.1830] {3.1 CV}	0.059 µg/L [0.038] {78.2 CV}		RK1:29->F02@3
MCT 546 Low-CV	0.857 Abs	0.355 µg/L		RK1:30->G02@3
MCT 546 Low-CV	0.785 Abs [0.8210] {6.2 CV}	0.458 µg/L [0.406] {17.9 CV}		RK1:30->H02@3
MCT 546 LFB 1	0.695 Abs	0.621 µg/L		RK1:31->A03@2
MCT 546 LFB 1	0.695 Abs [0.6950] {0.0 CV}	0.621 µg/L [0.621] {0.0 CV}		RK1:31->B03@2
*****				
Statistic				
MCT Std 0 [MEAN]	1.2195	0.0405		
MCT Std 0 [SD]	0.1266	0.0573		
MCT Std 0 [%CV]	10.3790	141.4214		
MCT Std 1 [MEAN]	1.0700	0.1310		
MCT Std 1 [SD]	0.0099	0.0085		
MCT Std 1 [%CV]	0.9252	6.4773		
MCT Std 1 [%DIFF]		-12.6667		
MCT Std 2 [MEAN]	0.7965	0.4400		
MCT Std 2 [SD]	0.0078	0.0113		
MCT Std 2 [%CV]	0.9765	2.5713		
MCT Std 2 [%DIFF]		10.0000		
MCT Std 3 [MEAN]	0.5730	0.9480		
MCT Std 3 [SD]	0.0057	0.0198		
MCT Std 3 [%CV]	0.9872	2.0885		
MCT Std 3 [%DIFF]		-5.2000		
MCT Std 4 [MEAN]	0.4015	1.9550		

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0021	0.0212		
MCT Std 4 [%CV]	0.5283	1.0851		
MCT Std 4 [%DIFF]		-2.2500		
MCT Std 5 [MEAN]	0.2680			
MCT Std 5 [SD]	0.0071			
MCT Std 5 [%CV]	2.6385			
MCT 546 LRB 1 [MEAN]	1.1830	0.0380		
MCT 546 LRB 1 [SD]	0.0368	0.0297		
MCT 546 LRB 1 [%CV]	3.1082	78.1539		
MCT 546 Low-CV [MEAN]	0.8210	0.4065		
MCT 546 Low-CV [SD]	0.0509	0.0728		
MCT 546 Low-CV [%CV]	6.2012	17.9169		
MCT 546 LFB 1 [MEAN]	0.6950	0.6210		
MCT 546 LFB 1 [SD]	0.0000	0.0000		
MCT 546 LFB 1 [%CV]	0.0000	0.0000		

Assay Curve

y = (A-D)/(1+(x/C)^B) + D  
Weight: NONE  
A = 1.2263  
B = 1.1440  
C = 0.59369  
D = 0.19103  
R2 coef = 0.99784

