



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	5/29/2019	5/30/2019	< 0.30	
MCT 546 LFB 1	Lab Fortified Blank (True value = 0.600)	5/29/2019	5/30/2019	0.38	63
AB38909	Hardy Lake SRA	5/28/2019	5/30/2019	< 0.30	
AB38909LD	Hardy Lake SRA (Lab Duplicate)	5/28/2019	5/30/2019	< 0.30	
AB38907	Field Blank	5/28/2019	5/30/2019	< 0.30	
AB38917	Hardy Lake SRA (Field Duplicate)	5/28/2019	5/30/2019	< 0.30	
MCT 546 LFB 2	Lab Fortified Blank (True value = 0.600)	5/29/2019	5/30/2019	0.51	85
MCT 546 LRB 2	Lab Reagent Blank	5/29/2019	5/30/2019	< 0.30	

Test Information

Request: 5/30/2019 2:25:02 PM
Date: 5/30/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
MCT Std 0	MICROCYSTINS ADDA 546	1.266 Abs	0.090 µg/L	R^2=0.97732	0.000
MCT Std 0	MICROCYSTINS ADDA 546	1.404 Abs [1.3350] {7.3 CV}	0.000 µg/L [0.045] {141.1}	R^2=0.97732	0.000
MCT Std 1	MICROCYSTINS ADDA 546	1.191 Abs	0.146 µg/L	R^2=0.97732	0.150
MCT Std 1	MICROCYSTINS ADDA 546	1.114 Abs [1.1525] {4.7 CV}	0.193 µg/L [0.169] {19.6}	R^2=0.97732	0.150
MCT Std 2	MICROCYSTINS ADDA 546	0.832 Abs	0.366 µg/L	R^2=0.97732	0.400
MCT Std 2	MICROCYSTINS ADDA 546	0.819 Abs [0.8255] {1.1 CV}	0.375 µg/L [0.370] {1.7}	R^2=0.97732	0.400
MCT Std 3	MICROCYSTINS ADDA 546	0.513 Abs	0.742 µg/L	R^2=0.97732	1.000
MCT Std 3	MICROCYSTINS ADDA 546	0.174 Abs [0.3435] {69.8 CV}	> 5.000 µg/L [0.742]		1.000
MCT Std 4	MICROCYSTINS ADDA 546	0.439 Abs	0.959 µg/L	R^2=0.97732	2.000
MCT Std 4	MICROCYSTINS ADDA 546	0.440 Abs [0.4395] {0.2 CV}	0.955 µg/L [0.957] {0.3}	R^2=0.97732	2.000
MCT Std 5	MICROCYSTINS ADDA 546	0.252 Abs	> 5.000 µg/L		5.000
MCT Std 5	MICROCYSTINS ADDA 546	0.275 Abs [0.2635] {6.2 CV}	> 5.000 µg/L		5.000
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.207 Abs	0.135 µg/L		
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.229 Abs [1.2180] {1.3 CV}	0.120 µg/L [0.127] {8.3}		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.851 Abs	0.353 µg/L		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.759 Abs [0.8050] {8.1 CV}	0.422 µg/L [0.387] {12.6}		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.789 Abs	0.398 µg/L		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.833 Abs [0.8110] {3.8 CV}	0.365 µg/L [0.382] {6.1}		
AB38909	MICROCYSTINS ADDA 546	1.319 Abs	0.024 µg/L	LOW	0.300 - 5
AB38909	MICROCYSTINS ADDA 546	1.297 Abs [1.3080] {1.2 CV}	0.041 µg/L [0.032] {37.0}	LOW [LOW]	0.300 - 5
AB38909LD	MICROCYSTINS ADDA 546	1.194 Abs	0.110 µg/L	LOW	0.300 - 5
AB38909LD	MICROCYSTINS ADDA 546	1.194 Abs [1.1940] {0.0 CV}	0.110 µg/L [0.110] {0.0}	LOW [LOW]	0.300 - 5
AB38907	MICROCYSTINS ADDA 546	1.300 Abs	0.039 µg/L	LOW	0.300 - 5
AB38907	MICROCYSTINS ADDA 546	1.446 Abs [1.3730] {7.5 CV}	0.000 µg/L [0.020] {141.1}	LOW [LOW]	0.300 - 5
AB38917	MICROCYSTINS ADDA 546	1.469 Abs	0.000 µg/L	LOW	0.300 - 5
AB38917	MICROCYSTINS ADDA 546	1.474 Abs [1.4715] {0.2 CV}	0.000 µg/L [0.000]	LOW [LOW]	0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	0.760 Abs	0.500 µg/L		0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	0.748 Abs [0.7540] {1.1 CV}	0.517 µg/L [0.508] {2.4}		0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.301 Abs	0.038 µg/L	LOW	0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.273 Abs [1.2870] {1.5 CV}	0.058 µg/L [0.048] {29.5}	LOW [LOW]	0.300 - 5

Note

Signature

Date: 5/30/2019

David Jordan



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: "

Incomplete

"

Name	Absorbance	Concentration	Interpretation	Position	
5/30/2019 2:25:02 PM					
MCT Std 0	1.266 Abs	0.063 µg/L	R ² =0.99453	RK1:23->A01@2	
MCT Std 0	1.404 Abs [1.3350] {7.3 CV}	0.000 µg/L [0.032] {141.4 CV}	R ² =0.99453	RK1:23->B01@2	
MCT Std 1	1.191 Abs	0.112 µg/L	R ² =0.99453	RK1:24->C01@2	
MCT Std 1	1.114 Abs [1.1525] {4.7 CV}	0.164 µg/L [0.138] {26.6 CV}	R ² =0.99453	RK1:24->D01@2	
MCT Std 2	0.832 Abs	0.409 µg/L	R ² =0.99453	RK1:25->E01@2	
MCT Std 2	0.819 Abs [0.8255] {1.1 CV}	0.424 µg/L [0.417] {2.5 CV}	R ² =0.99453	RK1:25->F01@3	
MCT Std 3	0.513 Abs	1.084 µg/L	R ² =0.99453	RK1:26->G01@3	
MCT Std 4	0.439 Abs	1.487 µg/L	R ² =0.99453	RK1:27->A02@2	
MCT Std 4	0.440 Abs [0.4395] {0.2 CV}	1.480 µg/L [1.484] {0.3 CV}	R ² =0.99453	RK1:27->B02@2	
MCT Std 5	0.252 Abs	> 5.000 µg/L		RK1:28->C02@2	
MCT Std 5	0.275 Abs [0.2635] {6.2 CV}	> 5.000 µg/L		RK1:28->D02@2	

5/30/2019 2:25:02 PM					
MCT 546 LRB 1	1.207 Abs	0.102 µg/L		RK1:29->E02@2	
MCT 546 LRB 1	1.229 Abs [1.2180] {1.3 CV}	0.087 µg/L [0.094] {11.2 CV}		RK1:29->F02@3	
MCT 546 Low-CV	0.851 Abs	0.387 µg/L		RK1:30->G02@3	
MCT 546 Low-CV	0.759 Abs [0.8050] {8.1 CV}	0.501 µg/L [0.444] {18.2 CV}		RK1:30->H02@3	
MCT 546 LFB 1	0.789 Abs	0.461 µg/L		RK1:31->A03@2	
MCT 546 LFB 1	0.833 Abs [0.8110] {3.8 CV}	0.407 µg/L [0.434] {8.8 CV}		RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.3350	0.0315			
MCT Std 0 [SD]	0.0976	0.0445			
MCT Std 0 [%CV]	7.3094	141.4214			
MCT Std 1 [MEAN]	1.1525	0.1380			
MCT Std 1 [SD]	0.0544	0.0368			
MCT Std 1 [%CV]	4.7243	26.6446			
MCT Std 1 [%DIFF]		-8.0000			
MCT Std 2 [MEAN]	0.8255	0.4165			
MCT Std 2 [SD]	0.0092	0.0106			
MCT Std 2 [%CV]	1.1136	2.5466			
MCT Std 2 [%DIFF]		4.1250			
MCT Std 3 [MEAN]	0.5130	1.0840			
MCT Std 3 [%DIFF]		8.4000			
MCT Std 4 [MEAN]	0.4395	1.4835			
MCT Std 4 [SD]	0.0007	0.0049			
MCT Std 4 [%CV]	0.1609	0.3337			
MCT Std 4 [%DIFF]		-25.8250			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 5 [MEAN]	0.2635				
MCT Std 5 [SD]	0.0163				
MCT Std 5 [%CV]	6.1721				
MCT 546 LRB 1 [MEAN]	1.2180	0.0945			
MCT 546 LRB 1 [SD]	0.0156	0.0106			
MCT 546 LRB 1 [%CV]	1.2772	11.2239			
MCT 546 Low-CV [MEAN]	0.8050	0.4440			
MCT 546 Low-CV [SD]	0.0651	0.0806			
MCT 546 Low-CV [%CV]	8.0812	18.1554			
MCT 546 LFB 1 [MEAN]	0.8110	0.4340			
MCT 546 LFB 1 [SD]	0.0311	0.0382			
MCT 546 LFB 1 [%CV]	3.8363	8.7981			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
Weight: NONE
A = 1.3423
B = 1.3148
C = 0.45212
D = 0.24952
R2 coef = 0.99462

