



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB47312	Raccoon Lake SRA	6/1/2021	6/2/2021	< 0.30
AB47313	Whitewater Memorial SP	6/1/2021	6/2/2021	< 0.30
AB47314	Quakertown SRA	6/1/2021	6/2/2021	< 0.30
AB47315	Mounds SRA	6/1/2021	6/2/2021	< 0.30
AB47316	Whitewater Memorial SP (Field Dup.)	6/1/2021	6/2/2021	< 0.30
AB47317	Field Blank	6/1/2021	6/2/2021	< 0.30

Test Report (by Request)

Test Information

 Request: 6/2/2021 2:36:06 PM
 Date: 6/2/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.777 Abs	0.000 µg/L	R^2=0.99784, 100.7			20J4209
MCT Std 0	MICROCYSTINS ADDA 54	1.748 Abs [1.7625] {1.2 C	0.007 µg/L [0.004]	R^2=0.99784, 99.14			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.472 Abs	0.124 µg/L	R^2=0.99784, 83.45			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.420 Abs [1.4460] {2.5 C	0.151 µg/L [0.137]	R^2=0.99784, 80.54			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	1.079 Abs	0.420 µg/L	R^2=0.99784, 61.20			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	1.057 Abs [1.0680] {1.5 C	0.445 µg/L [0.433]	R^2=0.99784, 59.95			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.768 Abs	0.978 µg/L	R^2=0.99784, 43.56			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.746 Abs [0.7570] {2.1 C	1.045 µg/L [1.012]	R^2=0.99784, 42.31			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.601 Abs	1.702 µg/L	R^2=0.99784, 34.05			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.589 Abs [0.5950] {1.4 C	1.783 µg/L [1.743]	R^2=0.99784, 33.40			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.386 Abs	> 5.000 µg/L	21.894 %Abs			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.373 Abs [0.3795] {2.4 C	> 5.000 µg/L	21.157 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.594 Abs	0.067 µg/L	90.414 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.607 Abs [1.6005] {0.6 C	0.061 µg/L [0.064]	91.151 %Abs [90.7			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.188 Abs	0.313 µg/L	67.385 %Abs			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.198 Abs [1.1930] {0.6 C	0.304 µg/L [0.308]	67.952 %Abs [67.6			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.972 Abs	0.557 µg/L	55.133 %Abs			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.959 Abs [0.9655] {1.0 C	0.576 µg/L [0.566]	54.396 %Abs [54.7			20J4209

Note

Signature

Test Report (by Request)

Test Information

 Request: 6/2/2021 2:36:37 PM
 Date: 6/2/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB47312	MICROCYSTINS ADDA 54	1.512 Abs	0.104 µg/L	Low, 85.763 %Abs		0.300 - 5.000	20J4209
AB47312	MICROCYSTINS ADDA 54	1.494 Abs [1.5030] {0.8 C	0.113 µg/L [0.109]	Low, 84.742 %Abs		0.300 - 5.000	20J4209
AB47312MS	MICROCYSTINS ADDA 54	0.831 Abs	0.816 µg/L	47.136 %Abs		0.300 - 5.000	20J4209
AB47312MS	MICROCYSTINS ADDA 54	0.802 Abs [0.8165] {2.5 C	0.886 µg/L [0.851]	45.491 %Abs [46.3		0.300 - 5.000	20J4209
AB47312MSD	MICROCYSTINS ADDA 54	0.823 Abs	0.834 µg/L	46.682 %Abs		0.300 - 5.000	20J4209
AB47312MSD	MICROCYSTINS ADDA 54	0.753 Abs [0.7880] {6.3 C	1.023 µg/L [0.928]	42.711 %Abs [44.6		0.300 - 5.000	20J4209
AB47313	MICROCYSTINS ADDA 54	1.539 Abs	0.091 µg/L	Low, 87.294 %Abs		0.300 - 5.000	20J4209
AB47313	MICROCYSTINS ADDA 54	1.573 Abs [1.5560] {1.5 C	0.076 µg/L [0.083]	Low, 89.223 %Abs		0.300 - 5.000	20J4209
AB47314	MICROCYSTINS ADDA 54	1.560 Abs	0.081 µg/L	Low, 88.486 %Abs		0.300 - 5.000	20J4209
AB47314	MICROCYSTINS ADDA 54	1.537 Abs [1.5485] {1.1 C	0.092 µg/L [0.087]	Low, 87.181 %Abs		0.300 - 5.000	20J4209
AB47315	MICROCYSTINS ADDA 54	1.534 Abs	0.093 µg/L	Low, 87.011 %Abs		0.300 - 5.000	20J4209
AB47315	MICROCYSTINS ADDA 54	1.492 Abs [1.5130] {2.0 C	0.113 µg/L [0.103]	Low, 84.628 %Abs		0.300 - 5.000	20J4209
AB47316	MICROCYSTINS ADDA 54	1.468 Abs	0.126 µg/L	Low, 83.267 %Abs		0.300 - 5.000	20J4209
AB47316	MICROCYSTINS ADDA 54	1.472 Abs [1.4700] {0.2 C	0.124 µg/L [0.125]	Low, 83.494 %Abs		0.300 - 5.000	20J4209
AB47317	MICROCYSTINS ADDA 54	1.745 Abs	0.008 µg/L	Low, 98.979 %Abs		0.300 - 5.000	20J4209
AB47317	MICROCYSTINS ADDA 54	1.778 Abs [1.7615] {1.3 C	0.000 µg/L [0.004]	Low, 100.851 %Abs		0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.919 Abs	0.641 µg/L	52.127 %Abs		0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.921 Abs [0.9200] {0.2 C	0.638 µg/L [0.640]	52.240 %Abs [52.1		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.679 Abs	0.032 µg/L	Low, 95.235 %Abs		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.602 Abs [1.6405] {3.3 C	0.063 µg/L [0.047]	Low, 90.868 %Abs		0.300 - 5.000	20J4209

Note

Signature

Charles Hostetter 6/2/2021

Assay Information

Assay Name: MICROCYSTINS ADDA 546_

Version: 2

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: 1 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: 9/30/2020 10:02:13 AM

Normal: 0.300 - 5.000

of decimals: 3

Kit Lot Number: 20J4209

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
6/2/2021 2:36:06 PM				
MCT Std 0	1.777 Abs	0.000 µg/L	R ² =0.99784, 100.794 %Abs	RK1:23->A01@2
MCT Std 0	1.748 Abs [1.7625] {1.2 CV}	0.007 µg/L [0.004] {141.4 CV}	R ² =0.99784, 99.149 %Abs	RK1:23->B01@2
MCT Std 1	1.472 Abs	0.124 µg/L	R ² =0.99784, 83.494 %Abs	RK1:24->C01@2
MCT Std 1	1.420 Abs [1.4460] {2.5 CV}	0.151 µg/L [0.137] {13.9 CV}	R ² =0.99784, 80.545 %Abs	RK1:24->D01@2
MCT Std 2	1.079 Abs	0.420 µg/L	R ² =0.99784, 61.202 %Abs	RK1:25->E01@2
MCT Std 2	1.057 Abs [1.0680] {1.5 CV}	0.445 µg/L [0.433] {4.1 CV}	R ² =0.99784, 59.955 %Abs	RK1:25->F01@3
MCT Std 3	0.768 Abs	0.978 µg/L	R ² =0.99784, 43.562 %Abs	RK1:26->G01@3
MCT Std 3	0.746 Abs [0.7570] {2.1 CV}	1.045 µg/L [1.012] {4.7 CV}	R ² =0.99784, 42.314 %Abs	RK1:26->H01@3
MCT Std 4	0.601 Abs	1.702 µg/L	R ² =0.99784, 34.090 %Abs	RK1:27->A02@2
MCT Std 4	0.589 Abs [0.5950] {1.4 CV}	1.783 µg/L [1.743] {3.3 CV}	R ² =0.99784, 33.409 %Abs	RK1:27->B02@2
MCT Std 5	0.386 Abs	> 5.000 µg/L	21.894 %Abs	RK1:28->C02@2
MCT Std 5	0.373 Abs [0.3795] {2.4 CV}	> 5.000 µg/L	21.157 %Abs	RK1:28->D02@2

6/2/2021 2:36:06 PM				
MCT 546 LRB 1	1.594 Abs	0.067 µg/L	90.414 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.607 Abs [1.6005] {0.6 CV}	0.061 µg/L [0.064] {6.6 CV}	91.151 %Abs [90.783 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	1.188 Abs	0.313 µg/L	67.385 %Abs	RK1:30->G02@3
MCT 546 Low-CV	1.198 Abs [1.1930] {0.6 CV}	0.304 µg/L [0.308] {2.1 CV}	67.952 %Abs [67.669 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.972 Abs	0.557 µg/L	55.133 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.959 Abs [0.9655] {1.0 CV}	0.576 µg/L [0.566] {2.4 CV}	54.396 %Abs [54.765 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.7625	0.0035		
MCT Std 0 [SD]	0.0205	0.0049		
MCT Std 0 [%CV]	1.1635	141.4214		
MCT Std 1 [MEAN]	1.4460	0.1375		
MCT Std 1 [SD]	0.0368	0.0191		
MCT Std 1 [%CV]	2.5428	13.8850		
MCT Std 1 [%DIFF]		-8.3333		
MCT Std 2 [MEAN]	1.0680	0.4325		
MCT Std 2 [SD]	0.0156	0.0177		
MCT Std 2 [%CV]	1.4566	4.0873		
MCT Std 2 [%DIFF]		8.1250		
MCT Std 3 [MEAN]	0.7570	1.0115		
MCT Std 3 [SD]	0.0156	0.0474		
MCT Std 3 [%CV]	2.0550	4.6838		
MCT Std 3 [%DIFF]		1.1500		
MCT Std 4 [MEAN]	0.5950	1.7425		

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0085	0.0573		
MCT Std 4 [%CV]	1.4261	3.2870		
MCT Std 4 [%DIFF]		-12.8750		
MCT Std 5 [MEAN]	0.3795			
MCT Std 5 [SD]	0.0092			
MCT Std 5 [%CV]	2.4222			
MCT 546 LRB 1 [MEAN]	1.6005	0.0640		
MCT 546 LRB 1 [SD]	0.0092	0.0042		
MCT 546 LRB 1 [%CV]	0.5743	6.6291		
MCT 546 Low-CV [MEAN]	1.1930	0.3085		
MCT 546 Low-CV [SD]	0.0071	0.0064		
MCT 546 Low-CV [%CV]	0.5927	2.0629		
MCT 546 LFB 1 [MEAN]	0.9655	0.5665		
MCT 546 LFB 1 [SD]	0.0092	0.0134		
MCT 546 LFB 1 [%CV]	0.9521	2.3716		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.7687
 B = 1.0127
 C = 0.49257
 D = 0.26834
 R2 coef = 0.99784
 50% = 0.709

