



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB47626	Raccoon Lake SRA	6/14/2021	6/17/2021	< 0.30
AB47628	Cagles Mill Lake Beach	6/14/2021	6/17/2021	< 0.30
AB47629	Paynetown SRA	6/14/2021	6/17/2021	< 0.30
AB47630	Fairfax SRA	6/14/2021	6/17/2021	< 0.30
AB47631	Starve Hollow SRA	6/14/2021	6/17/2021	< 0.30
AB47632	Whitewater Memorial SP	6/15/2021	6/17/2021	< 0.30
AB47633	Quakertown SRA	6/15/2021	6/17/2021	< 0.30
AB47634	Mounds SRA	6/15/2021	6/17/2021	< 0.30
AB47635	Hardy Lake SRA	6/15/2021	6/17/2021	0.38
AB47627	Deam Lake SRA	6/15/2021	6/17/2021	< 0.30
AB47636	Paynetown SRA (Field Duplicate)	6/14/2021	6/17/2021	< 0.30
AB47637	Field Blank	6/14/2021	6/17/2021	< 0.30
AB47651	Ft. Ben Harrison SP Dog Lake - East	6/14/2021	6/17/2021	< 0.30

Test Report (by Request)

Test Information

Request: 6/17/2021 12:19:22 PM

Date: 6/17/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.590 Abs	0.012 µg/L	R^2=0.99703, 100.1			20J4209
MCT Std 0	MICROCYSTINS ADDA 54	1.585 Abs [1.5875] {0.2 C	0.017 µg/L [0.015]	R^2=0.99703, 99.81			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.391 Abs	0.141 µg/L	R^2=0.99703, 87.55			20J4209
MCT Std 1	MICROCYSTINS ADDA 54	1.422 Abs [1.4065] {1.6 C	0.122 µg/L [0.132]	R^2=0.99703, 89.54			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	1.045 Abs	0.397 µg/L	R^2=0.99703, 65.80			20J4209
MCT Std 2	MICROCYSTINS ADDA 54	0.967 Abs [1.0060] {5.5 C	0.478 µg/L [0.438]	R^2=0.99703, 60.85			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.705 Abs	0.930 µg/L	R^2=0.99703, 44.35			20J4209
MCT Std 3	MICROCYSTINS ADDA 54	0.677 Abs [0.6910] {2.9 C	1.010 µg/L [0.970]	R^2=0.99703, 42.63			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.540 Abs	1.652 µg/L	R^2=0.99703, 34.00			20J4209
MCT Std 4	MICROCYSTINS ADDA 54	0.513 Abs [0.5265] {3.6 C	1.874 µg/L [1.763]	R^2=0.99703, 32.30			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.389 Abs	> 5.000 µg/L	24.496 %Abs			20J4209
MCT Std 5	MICROCYSTINS ADDA 54	0.350 Abs [0.3695] {7.5 C	> 5.000 µg/L	22.040 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.604 Abs	0.000 µg/L	101.008 %Abs			20J4209
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.587 Abs [1.5955] {0.8 C	0.015 µg/L [0.007]	100.000 %Abs [100			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.145 Abs	0.309 µg/L	72.103 %Abs			20J4209
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.141 Abs [1.1430] {0.2 C	0.312 µg/L [0.310]	71.851 %Abs [71.9			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.851 Abs	0.632 µg/L	53.589 %Abs			20J4209
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.914 Abs [0.8825] {5.0 C	0.543 µg/L [0.587]	57.557 %Abs [55.5			20J4209

Note

Signature

David Jordan 6/17/2021

Test Report (by Request)

Test Information

 Request: 6/17/2021 12:20:26 PM
 Date: 6/17/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB47626	MICROCYSTINS ADDA 54	1.511 Abs	0.068 µg/L	Low, 95.151 %Abs		0.300 - 5.000	20J4209
AB47626	MICROCYSTINS ADDA 54	1.539 Abs [1.5250] {1.3 C	0.050 µg/L [0.059]	Low, 96.914 %Abs		0.300 - 5.000	20J4209
AB47628	MICROCYSTINS ADDA 54	1.558 Abs	0.037 µg/L	Low, 98.111 %Abs		0.300 - 5.000	20J4209
AB47628	MICROCYSTINS ADDA 54	1.449 Abs [1.5035] {5.1 C	0.106 µg/L [0.072]	Low, 91.247 %Abs		0.300 - 5.000	20J4209
AB47629	MICROCYSTINS ADDA 54	1.556 Abs	0.039 µg/L	Low, 97.985 %Abs		0.300 - 5.000	20J4209
AB47629	MICROCYSTINS ADDA 54	1.428 Abs [1.4920] {6.1 C	0.118 µg/L [0.079]	Low, 89.924 %Abs		0.300 - 5.000	20J4209
AB47630	MICROCYSTINS ADDA 54	1.613 Abs	0.000 µg/L	Low, 101.574 %Abs		0.300 - 5.000	20J4209
AB47630	MICROCYSTINS ADDA 54	1.675 Abs [1.6440] {2.7 C	0.000 µg/L [0.000]	Low, 105.479 %Abs		0.300 - 5.000	20J4209
AB47631	MICROCYSTINS ADDA 54	1.571 Abs	0.028 µg/L	Low, 98.929 %Abs		0.300 - 5.000	20J4209
AB47631	MICROCYSTINS ADDA 54	1.561 Abs [1.5660] {0.5 C	0.035 µg/L [0.032]	Low, 98.300 %Abs		0.300 - 5.000	20J4209
AB47632	MICROCYSTINS ADDA 54	1.634 Abs	0.000 µg/L	Low, 102.897 %Abs		0.300 - 5.000	20J4209
AB47632	MICROCYSTINS ADDA 54	1.490 Abs [1.5620] {6.5 C	0.081 µg/L [0.041]	Low, 93.829 %Abs		0.300 - 5.000	20J4209
AB47633	MICROCYSTINS ADDA 54	1.496 Abs	0.077 µg/L	Low, 94.207 %Abs		0.300 - 5.000	20J4209
AB47633	MICROCYSTINS ADDA 54	1.378 Abs [1.4370] {5.8 C	0.149 µg/L [0.113]	Low, 86.776 %Abs		0.300 - 5.000	20J4209
AB47634	MICROCYSTINS ADDA 54	1.605 Abs	0.000 µg/L	Low, 101.071 %Abs		0.300 - 5.000	20J4209
AB47634	MICROCYSTINS ADDA 54	1.601 Abs [1.6030] {0.2 C	0.000 µg/L [0.000]	Low, 100.819 %Abs		0.300 - 5.000	20J4209
AB47634MS	MICROCYSTINS ADDA 54	0.874 Abs	0.598 µg/L	55.038 %Abs		0.300 - 5.000	20J4209
AB47634MS	MICROCYSTINS ADDA 54	0.839 Abs [0.8565] {2.9 C	0.652 µg/L [0.625]	52.834 %Abs [53.9		0.300 - 5.000	20J4209
AB47634MSD	MICROCYSTINS ADDA 54	0.936 Abs	0.515 µg/L	58.942 %Abs		0.300 - 5.000	20J4209
AB47634MSD	MICROCYSTINS ADDA 54	0.898 Abs [0.9170] {2.9 C	0.564 µg/L [0.539]	56.549 %Abs [57.7		0.300 - 5.000	20J4209
AB47635	MICROCYSTINS ADDA 54	1.071 Abs	0.372 µg/L	67.443 %Abs		0.300 - 5.000	20J4209
AB47635	MICROCYSTINS ADDA 54	1.056 Abs [1.0635] {1.0 C	0.386 µg/L [0.379]	66.499 %Abs [66.9		0.300 - 5.000	20J4209
AB47627	MICROCYSTINS ADDA 54	1.629 Abs	0.000 µg/L	Low, 102.582 %Abs		0.300 - 5.000	20J4209
AB47627	MICROCYSTINS ADDA 54	1.595 Abs [1.6120] {1.5 C	0.007 µg/L [0.004]	Low, 100.441 %Abs		0.300 - 5.000	20J4209
AB47636	MICROCYSTINS ADDA 54	1.657 Abs	0.000 µg/L	Low, 104.345 %Abs		0.300 - 5.000	20J4209
AB47636	MICROCYSTINS ADDA 54	1.596 Abs [1.6265] {2.7 C	0.005 µg/L [0.003]	Low, 100.504 %Abs		0.300 - 5.000	20J4209
AB47637	MICROCYSTINS ADDA 54	1.623 Abs	0.000 µg/L	Low, 102.204 %Abs		0.300 - 5.000	20J4209
AB47637	MICROCYSTINS ADDA 54	1.515 Abs [1.5690] {4.9 C	0.065 µg/L [0.032]	Low, 95.403 %Abs		0.300 - 5.000	20J4209
AB47651	MICROCYSTINS ADDA 54	1.561 Abs	0.035 µg/L	Low, 98.300 %Abs		0.300 - 5.000	20J4209
AB47651	MICROCYSTINS ADDA 54	1.446 Abs [1.5035] {5.4 C	0.107 µg/L [0.071]	Low, 91.058 %Abs		0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.984 Abs	0.459 µg/L	61.965 %Abs		0.300 - 5.000	20J4209
LFB 2	MICROCYSTINS ADDA 54	0.935 Abs [0.9595] {3.6 C	0.516 µg/L [0.487]	58.879 %Abs [60.4		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.660 Abs	0.000 µg/L	Low, 104.534 %Abs		0.300 - 5.000	20J4209
LRB 2	MICROCYSTINS ADDA 54	1.610 Abs [1.6350] {2.2 C	0.000 µg/L [0.000]	Low, 101.385 %Abs		0.300 - 5.000	20J4209

Note

Signature

David Jordan 6/17/2021

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
6/17/2021 12:19:22 PM				
MCT Std 0	1.590 Abs	0.012 µg/L	R ² =0.99703, 100.126 %Abs	RK1:23->A01@2
MCT Std 0	1.585 Abs [1.5875] {0.2 CV}	0.017 µg/L [0.015] {24.4 CV}	R ² =0.99703, 99.811 %Abs	RK1:23->B01@2
MCT Std 1	1.391 Abs	0.141 µg/L	R ² =0.99703, 87.594 %Abs	RK1:24->C01@2
MCT Std 1	1.422 Abs [1.4065] {1.6 CV}	0.122 µg/L [0.132] {10.2 CV}	R ² =0.99703, 89.547 %Abs	RK1:24->D01@2
MCT Std 2	1.045 Abs	0.397 µg/L	R ² =0.99703, 65.806 %Abs	RK1:25->E01@2
MCT Std 2	0.967 Abs [1.0060] {5.5 CV}	0.478 µg/L [0.438] {13.1 CV}	R ² =0.99703, 60.894 %Abs	RK1:25->F01@3
MCT Std 3	0.705 Abs	0.930 µg/L	R ² =0.99703, 44.395 %Abs	RK1:26->G01@3
MCT Std 3	0.677 Abs [0.6910] {2.9 CV}	1.010 µg/L [0.970] {5.8 CV}	R ² =0.99703, 42.632 %Abs	RK1:26->H01@3
MCT Std 4	0.540 Abs	1.652 µg/L	R ² =0.99703, 34.005 %Abs	RK1:27->A02@2
MCT Std 4	0.513 Abs [0.5265] {3.6 CV}	1.874 µg/L [1.763] {8.9 CV}	R ² =0.99703, 32.305 %Abs	RK1:27->B02@2
MCT Std 5	0.389 Abs	> 5.000 µg/L	24.496 %Abs	RK1:28->C02@2
MCT Std 5	0.350 Abs [0.3695] {7.5 CV}	> 5.000 µg/L	22.040 %Abs	RK1:28->D02@2

6/17/2021 12:19:22 PM				
MCT 546 LRB 1	1.604 Abs	0.000 µg/L	101.008 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.587 Abs [1.5955] {0.8 CV}	0.015 µg/L [0.007] {141.4 CV}	100.000 %Abs [100.472 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	1.145 Abs	0.309 µg/L	72.103 %Abs	RK1:30->G02@3
MCT 546 Low-CV	1.141 Abs [1.1430] {0.2 CV}	0.312 µg/L [0.310] {0.7 CV}	71.851 %Abs [71.977 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.851 Abs	0.632 µg/L	53.589 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.914 Abs [0.8825] {5.0 CV}	0.543 µg/L [0.587] {10.7 CV}	57.557 %Abs [55.573 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.5875	0.0145		
MCT Std 0 [SD]	0.0035	0.0035		
MCT Std 0 [%CV]	0.2227	24.3830		
MCT Std 1 [MEAN]	1.4065	0.1315		
MCT Std 1 [SD]	0.0219	0.0134		
MCT Std 1 [%CV]	1.5585	10.2168		
MCT Std 1 [%DIFF]		-12.3333		
MCT Std 2 [MEAN]	1.0060	0.4375		
MCT Std 2 [SD]	0.0552	0.0573		
MCT Std 2 [%CV]	5.4825	13.0916		
MCT Std 2 [%DIFF]		9.3750		
MCT Std 3 [MEAN]	0.6910	0.9700		
MCT Std 3 [SD]	0.0198	0.0566		
MCT Std 3 [%CV]	2.8653	5.8318		
MCT Std 3 [%DIFF]		-3.0000		
MCT Std 4 [MEAN]	0.5265	1.7630		

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0191	0.1570		
MCT Std 4 [%CV]	3.6262	8.9040		
MCT Std 4 [%DIFF]		-11.8500		
MCT Std 5 [MEAN]	0.3695			
MCT Std 5 [SD]	0.0276			
MCT Std 5 [%CV]	7.4634			
MCT 546 LRB 1 [MEAN]	1.5955	0.0075		
MCT 546 LRB 1 [SD]	0.0120	0.0106		
MCT 546 LRB 1 [%CV]	0.7534	141.4214		
MCT 546 Low-CV [MEAN]	1.1430	0.3105		
MCT 546 Low-CV [SD]	0.0028	0.0021		
MCT 546 Low-CV [%CV]	0.2475	0.6832		
MCT 546 LFB 1 [MEAN]	0.8825	0.5875		
MCT 546 LFB 1 [SD]	0.0445	0.0629		
MCT 546 LFB 1 [%CV]	5.0479	10.7119		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5993
 B = 1.3282
 C = 0.47692
 D = 0.33658
 R2 coef = 0.99703
 50% = 0.730

