



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB42349	Raccoon Lake SRA	5/18/2020	5/20/2020	< 0.30
AB42350	Deam Lake SRA	5/19/2020	5/20/2020	< 0.30
AB42351	Cagles Mill Lake Beach	5/18/2020	5/20/2020	< 0.30
AB42352	Paynetown SRA	5/18/2020	5/20/2020	< 0.30
AB42353	Fairfax SRA	5/18/2020	5/20/2020	< 0.30
AB42354	Starve Hollow SRA	5/18/2020	5/20/2020	< 0.30
AB42355	Whitewater Memorial SP	5/19/2020	5/20/2020	< 0.30
AB42356	Quakertown SRA	5/19/2020	5/20/2020	< 0.30
AB42357	Mounds SRA	5/19/2020	5/20/2020	< 0.30
AB42358	Hardy Lake SRA	5/19/2020	5/20/2020	< 0.30
AB42359	Field Blank	5/18/2020	5/20/2020	< 0.30
AB42360	Cagles Mill Lake Beach (Field Duplicate)	5/18/2020	5/20/2020	< 0.30

Test Information

Request: 5/20/2020 3:24:43 PM

Date: 5/20/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
MCT Std 0	MICROCYSTINS ADDA 546	1.257 Abs	0.004 µg/L	R ² =0.99887, 100.15		19L2093
MCT Std 0	MICROCYSTINS ADDA 546	1.254 Abs [1.2555] {0.2 CV}	0.007 µg/L [0.006] {3}	R ² =0.99887, 100.00		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.077 Abs	0.145 µg/L	R ² =0.99887, 85.817		19L2093
MCT Std 1	MICROCYSTINS ADDA 546	1.092 Abs [1.0845] {1.0 CV}	0.133 µg/L [0.139] {6}	R ² =0.99887, 87.012		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.818 Abs	0.405 µg/L	R ² =0.99887, 65.179		19L2093
MCT Std 2	MICROCYSTINS ADDA 546	0.793 Abs [0.8055] {2.2 CV}	0.440 µg/L [0.423] {5}	R ² =0.99887, 63.187		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.538 Abs	1.028 µg/L	R ² =0.99887, 42.869		19L2093
MCT Std 3	MICROCYSTINS ADDA 546	0.555 Abs [0.5465] {2.2 CV}	0.965 µg/L [0.997] {4}	R ² =0.99887, 44.223		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.414 Abs	1.764 µg/L	R ² =0.99887, 32.988		19L2093
MCT Std 4	MICROCYSTINS ADDA 546	0.400 Abs [0.4070] {2.4 CV}	1.902 µg/L [1.833] {5}	R ² =0.99887, 31.873		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.276 Abs	> 5.000 µg/L	21.992 %Abs		19L2093
MCT Std 5	MICROCYSTINS ADDA 546	0.271 Abs [0.2735] {1.3 CV}	> 5.000 µg/L	21.594 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.151 Abs	0.088 µg/L	91.713 %Abs		19L2093
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.132 Abs [1.1415] {1.2 CV}	0.102 µg/L [0.095] {1}	90.199 %Abs [90.956]		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.928 Abs	0.278 µg/L	73.944 %Abs		19L2093
MCT 546 Low-CV	MICROCYSTINS ADDA 546	0.868 Abs [0.8980] {4.7 CV}	0.343 µg/L [0.310] {1}	69.163 %Abs [71.554]		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.780 Abs	0.458 µg/L	62.151 %Abs		19L2093
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.766 Abs [0.7730] {1.3 CV}	0.479 µg/L [0.469] {3}	61.036 %Abs [61.594]		19L2093

Note

Signature *David Jordan*

Date: 5/20/2020

Test Report (by Request)

Test Information

Request: 5/20/2020 3:26:41 PM

Date: 5/20/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
AB42349	MICROCYSTINS ADDA 546	1.082 Abs	0.141 µg/L	LOW, 86.215 %ABS	0.300 - 5.000	19L2093
AB42349	MICROCYSTINS ADDA 546	1.089 Abs [1.0855] {0.5 CV}	0.135 µg/L [0.138] {3}	LOW, 86.773 %ABS	0.300 - 5.000	19L2093
AB42349MS	MICROCYSTINS ADDA 546	0.668 Abs	0.656 µg/L	53.227 %Abs	0.300 - 5.000	19L2093
AB42349MS	MICROCYSTINS ADDA 546	0.650 Abs [0.6590] {1.9 CV}	0.696 µg/L [0.676] {4}	51.793 %Abs [52.510]	0.300 - 5.000	19L2093
AB42349MSD	MICROCYSTINS ADDA 546	0.671 Abs	0.650 µg/L	53.466 %Abs	0.300 - 5.000	19L2093
AB42349MSD	MICROCYSTINS ADDA 546	0.626 Abs [0.6485] {4.9 CV}	0.754 µg/L [0.702] {1}	49.880 %Abs [51.673]	0.300 - 5.000	19L2093
AB42350	MICROCYSTINS ADDA 546	1.193 Abs	0.056 µg/L	LOW, 95.060 %ABS	0.300 - 5.000	19L2093
AB42350	MICROCYSTINS ADDA 546	1.199 Abs [1.1960] {0.4 CV}	0.052 µg/L [0.054] {5}	LOW, 95.538 %ABS	0.300 - 5.000	19L2093
AB42351	MICROCYSTINS ADDA 546	1.170 Abs	0.074 µg/L	LOW, 93.227 %ABS	0.300 - 5.000	19L2093
AB42351	MICROCYSTINS ADDA 546	1.161 Abs [1.1655] {0.5 CV}	0.080 µg/L [0.077] {5}	LOW, 92.510 %ABS	0.300 - 5.000	19L2093
AB42352	MICROCYSTINS ADDA 546	1.173 Abs	0.071 µg/L	LOW, 93.466 %ABS	0.300 - 5.000	19L2093
AB42352	MICROCYSTINS ADDA 546	1.146 Abs [1.1595] {1.6 CV}	0.092 µg/L [0.082] {1}	LOW, 91.315 %ABS	0.300 - 5.000	19L2093
AB42353	MICROCYSTINS ADDA 546	1.129 Abs	0.104 µg/L	LOW, 89.960 %ABS	0.300 - 5.000	19L2093
AB42353	MICROCYSTINS ADDA 546	1.016 Abs [1.0725] {7.5 CV}	0.195 µg/L [0.149] {4}	LOW, 80.956 %ABS	0.300 - 5.000	19L2093
AB42354	MICROCYSTINS ADDA 546	1.188 Abs	0.060 µg/L	LOW, 94.661 %ABS	0.300 - 5.000	19L2093
AB42354	MICROCYSTINS ADDA 546	1.163 Abs [1.1755] {1.5 CV}	0.079 µg/L [0.069] {1}	LOW, 92.669 %ABS	0.300 - 5.000	19L2093
AB42355	MICROCYSTINS ADDA 546	1.092 Abs	0.133 µg/L	LOW, 87.012 %ABS	0.300 - 5.000	19L2093
AB42355	MICROCYSTINS ADDA 546	1.106 Abs [1.0990] {0.9 CV}	0.122 µg/L [0.127] {6}	LOW, 88.127 %ABS	0.300 - 5.000	19L2093
AB42356	MICROCYSTINS ADDA 546	1.102 Abs	0.125 µg/L	LOW, 87.809 %ABS	0.300 - 5.000	19L2093
AB42356	MICROCYSTINS ADDA 546	1.085 Abs [1.0935] {1.1 CV}	0.138 µg/L [0.132] {7}	LOW, 86.454 %ABS	0.300 - 5.000	19L2093
AB42357	MICROCYSTINS ADDA 546	1.138 Abs	0.098 µg/L	LOW, 90.677 %ABS	0.300 - 5.000	19L2093
AB42357	MICROCYSTINS ADDA 546	1.093 Abs [1.1155] {2.9 CV}	0.132 µg/L [0.115] {2}	LOW, 87.092 %ABS	0.300 - 5.000	19L2093
AB42358	MICROCYSTINS ADDA 546	1.204 Abs	0.048 µg/L	LOW, 95.936 %ABS	0.300 - 5.000	19L2093
AB42358	MICROCYSTINS ADDA 546	1.188 Abs [1.1960] {0.9 CV}	0.060 µg/L [0.054] {1}	LOW, 94.661 %ABS	0.300 - 5.000	19L2093
AB42359	MICROCYSTINS ADDA 546	1.192 Abs	0.057 µg/L	LOW, 94.980 %ABS	0.300 - 5.000	19L2093
AB42359	MICROCYSTINS ADDA 546	1.171 Abs [1.1815] {1.3 CV}	0.073 µg/L [0.065] {1}	LOW, 93.307 %ABS	0.300 - 5.000	19L2093
AB42360	MICROCYSTINS ADDA 546	1.144 Abs	0.093 µg/L	LOW, 91.155 %ABS	0.300 - 5.000	19L2093
AB42360	MICROCYSTINS ADDA 546	1.118 Abs [1.1310] {1.6 CV}	0.113 µg/L [0.103] {1}	LOW, 89.084 %ABS	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.747 Abs	0.509 µg/L	59.522 %Abs	0.300 - 5.000	19L2093
LFB 2	MICROCYSTINS ADDA 546	0.719 Abs [0.7330] {2.7 CV}	0.557 µg/L [0.533] {6}	57.291 %Abs [58.406]	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.251 Abs	0.010 µg/L	LOW, 99.681 %ABS	0.300 - 5.000	19L2093
LRB 2	MICROCYSTINS ADDA 546	1.218 Abs [1.2345] {1.9 CV}	0.038 µg/L [0.024] {8}	LOW, 97.052 %ABS	0.300 - 5.000	19L2093

Note

 Signature *David Jordan*

Date: 5/20/2020

Assay Information

Assay Name: MICROCYSTINS ADDA 546
 Version: 2
 Temperature: Room Temperature
 Last Modified By: Security disabled
 Units: µg/L
 Assay Description:
 Assay Substances:

Assay Mode: 4-Parameter Logistic Weight by:None
 Well Type: Flat bottom
 Last Modified On: 8/13/2019 2:01:59 PM
 Normal: 0.300 - 5.000
 # of decimals: 3
 Kit Lot Number: 19L2093

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 Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
5/20/2020 3:24:43 PM				
MCT Std 0	1.257 Abs		R ² =0.99887, 100.159 %Abs	RK1:23->A01@2
MCT Std 0	1.254 Abs [1.2555] {0.2 CV}		R ² =0.99887, 100.000 %Abs	RK1:23->B01@2
MCT Std 1	1.077 Abs		R ² =0.99887, 85.817 %Abs	RK1:24->C01@2
MCT Std 1	1.092 Abs [1.0845] {1.0 CV}		R ² =0.99887, 87.012 %Abs	RK1:24->D01@2
MCT Std 2	0.818 Abs		R ² =0.99887, 65.179 %Abs	RK1:25->E01@2
MCT Std 2	0.793 Abs [0.8055] {2.2 CV}		R ² =0.99887, 63.187 %Abs	RK1:25->F01@3
MCT Std 3	0.538 Abs		R ² =0.99887, 42.869 %Abs	RK1:26->G01@3
MCT Std 3	0.555 Abs [0.5465] {2.2 CV}		R ² =0.99887, 44.223 %Abs	RK1:26->H01@3
MCT Std 4	0.414 Abs		R ² =0.99887, 32.988 %Abs	RK1:27->A02@2
MCT Std 4	0.400 Abs [0.4070] {2.4 CV}		R ² =0.99887, 31.873 %Abs	RK1:27->B02@2
MCT Std 5	0.276 Abs		21.992 %Abs	RK1:28->C02@2
MCT Std 5	0.271 Abs [0.2735] {1.3 CV}		21.594 %Abs	RK1:28->D02@2

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MCT 546 LRB 1	1.151 Abs		91.713 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.132 Abs [1.1415] {1.2 CV}		90.199 %Abs [90.956 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	0.928 Abs		73.944 %Abs	RK1:30->G02@3
MCT 546 Low-CV	0.868 Abs [0.8980] {4.7 CV}		69.163 %Abs [71.554 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.780 Abs		62.151 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.766 Abs [0.7730] {1.3 CV}		61.036 %Abs [61.594 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.2555			
MCT Std 0 [SD]	0.0021			
MCT Std 0 [%CV]	0.1690			
MCT Std 1 [MEAN]	1.0845			
MCT Std 1 [SD]	0.0106			
MCT Std 1 [%CV]	0.9780			
MCT Std 1 [%DIFF]				
MCT Std 2 [MEAN]	0.8055			
MCT Std 2 [SD]	0.0177			
MCT Std 2 [%CV]	2.1946			
MCT Std 2 [%DIFF]				
MCT Std 3 [MEAN]	0.5465			
MCT Std 3 [SD]	0.0120			
MCT Std 3 [%CV]	2.1996			
MCT Std 3 [%DIFF]				
MCT Std 4 [MEAN]	0.4070			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0099			
MCT Std 4 [%CV]	2.4323			
MCT Std 4 [%DIFF]				
MCT Std 5 [MEAN]	0.2735			
MCT Std 5 [SD]	0.0035			
MCT Std 5 [%CV]	1.2927			
MCT 546 LRB 1 [MEAN]	1.1415			
MCT 546 LRB 1 [SD]	0.0134			
MCT 546 LRB 1 [%CV]	1.1770			
MCT 546 Low-CV [MEAN]	0.8980			
MCT 546 Low-CV [SD]	0.0424			
MCT 546 Low-CV [%CV]	4.7245			
MCT 546 LFB 1 [MEAN]	0.7730			
MCT 546 LFB 1 [SD]	0.0099			
MCT 546 LFB 1 [%CV]	1.2807			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.2599
 B = 1.2045
 C = 0.52187
 D = 0.21896
 R2 coef = 0.99887
 50% = 0.750

