



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46122	Cecil M. Harden Lake - Raccoon Lake SRA Beach	8/4/2025	8/6/2025	< 0.30
AC46123	Cagles Mill Lake - Lieber SRA Beach	8/4/2025	8/6/2025	< 0.30
AC46124	Monroe Lake - Fairfax SRA Beach	8/4/2025	8/6/2025	< 0.30
AC46125	Monroe Lake - Paynetown SRA Beach	8/4/2025	8/6/2025	< 0.30
AC46126	Starve Hollow SRA - Starve Hollow Lake Beach	8/4/2025	8/6/2025	< 0.30
AC46127	Whitewater Memorial SP - Whitewater Lake Beach	8/5/2025	8/6/2025	< 0.30
AC46128	Brookville Lake - Quakertown SRA Beach	8/5/2025	8/6/2025	< 0.30
AC46129	Brookville Lake - Mounds SRA Beach	8/5/2025	8/6/2025	0.31
AC46130	Hardy Lake SRA - Hardy Lake SRA Beach	8/5/2025	8/6/2025	< 0.30
AC46131	Deam Lake SRA - Deam Lake Beach	8/5/2025	8/6/2025	< 0.30
AC46132	Brookville Lake - Mounds SRA Beach (Field Duplicate)	8/5/2025	8/6/2025	< 0.30
AC46133	Field Blank	8/5/2025	8/6/2025	< 0.30
AC46134	Ft. Ben Harrison SP Dog Lake	8/4/2025	8/6/2025	< 0.30
AC46147	Mississinewa Lake - Miami SRA Beach	8/4/2025	8/6/2025	6.50

Test Report (by Request)

Test Information

Request: 8/6/2025 4:04:30 PM
Date: 8/6/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.456 Abs	0.001 µg/L	R^2=0.99768, 100.4		0.000	Kit:25085(
MCT Std 0	MICROCYSTINS ADDA 54	1.443 Abs [1.4495] {0.6 C	0.011 µg/L [0.006]	R^2=0.99768, 99.51		0.000	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.307 Abs	0.102 µg/L	R^2=0.99768, 90.13		0.150	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.218 Abs [1.2625] {5.0 C	0.166 µg/L [0.134]	R^2=0.99768, 84.00		0.150	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	0.971 Abs	0.407 µg/L	R^2=0.99768, 66.96		0.400	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	0.928 Abs [0.9495] {3.2 C	0.465 µg/L [0.436]	R^2=0.99768, 64.00		0.400	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.678 Abs	1.012 µg/L	R^2=0.99768, 46.75		1.000	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.687 Abs [0.6825] {0.9 C	0.981 µg/L [0.997]	R^2=0.99768, 47.37		1.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.525 Abs	1.839 µg/L	R^2=0.99768, 36.20		2.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.536 Abs [0.5305] {1.5 C	1.748 µg/L [1.794]	R^2=0.99768, 36.96		2.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.368 Abs	> 5.000 µg/L	25.379 %Abs		5.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.356 Abs [0.3620] {2.3 C	> 5.000 µg/L	24.552 %Abs		5.000	Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.350 Abs	0.073 µg/L	93.103 %Abs			Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.304 Abs [1.3270] {2.5 C	0.104 µg/L [0.089]	89.931 %Abs [91.5			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.028 Abs	0.340 µg/L	70.897 %Abs			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.004 Abs [1.0160] {1.7 C	0.367 µg/L [0.354]	69.241 %Abs [70.0			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.899 Abs	0.508 µg/L	62.000 %Abs			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.890 Abs [0.8945] {0.7 C	0.522 µg/L [0.515]	61.379 %Abs [61.6			Kit:25085(

Note

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests
* Generated by software version (6.4.1.1171/1085/1.00/0.95) 8/6/2025 4:37:27 PM

Signature 

David Jordan 8/6/2025

Test Report (by Request)

Test Information

Request: 8/6/2025 4:05:49 PM
Date: 8/6/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC46122	MICROCYSTINS ADDA 54	1.266 Abs	0.131 µg/L	Low, 87.310 %Abs		0.300 - 5.000	Kit:25085(
AC46122	MICROCYSTINS ADDA 54	1.220 Abs [1.2430] {2.6 C	0.165 µg/L [0.148]	Low, 84.138 %Abs		0.300 - 5.000	Kit:25085(
AC46122MS	MICROCYSTINS ADDA 54	0.725 Abs	0.866 µg/L	50.000 %Abs		0.300 - 5.000	Kit:25085(
AC46122MS	MICROCYSTINS ADDA 54	0.706 Abs [0.7155] {1.9 C	0.921 µg/L [0.894]	48.690 %Abs [49.3		0.300 - 5.000	Kit:25085(
AC46122MSD	MICROCYSTINS ADDA 54	0.792 Abs	0.702 µg/L	54.621 %Abs		0.300 - 5.000	Kit:25085(
AC46122MSD	MICROCYSTINS ADDA 54	0.831 Abs [0.8115] {3.4 C	0.623 µg/L [0.663]	57.310 %Abs [55.9		0.300 - 5.000	Kit:25085(
AC46123	MICROCYSTINS ADDA 54	1.227 Abs	0.159 µg/L	Low, 84.621 %Abs		0.300 - 5.000	Kit:25085(
AC46123	MICROCYSTINS ADDA 54	1.230 Abs [1.2285] {0.2 C	0.157 µg/L [0.158]	Low, 84.828 %Abs		0.300 - 5.000	Kit:25085(
AC46124	MICROCYSTINS ADDA 54	1.330 Abs	0.086 µg/L	Low, 91.724 %Abs		0.300 - 5.000	Kit:25085(
AC46124	MICROCYSTINS ADDA 54	1.306 Abs [1.3180] {1.3 C	0.103 µg/L [0.095]	Low, 90.069 %Abs		0.300 - 5.000	Kit:25085(
AC46125	MICROCYSTINS ADDA 54	1.303 Abs	0.105 µg/L	Low, 89.862 %Abs		0.300 - 5.000	Kit:25085(
AC46125	MICROCYSTINS ADDA 54	1.261 Abs [1.2820] {2.3 C	0.134 µg/L [0.120]	Low, 86.966 %Abs		0.300 - 5.000	Kit:25085(
AC46126	MICROCYSTINS ADDA 54	1.312 Abs	0.098 µg/L	Low, 90.483 %Abs		0.300 - 5.000	Kit:25085(
AC46126	MICROCYSTINS ADDA 54	1.280 Abs [1.2960] {1.7 C	0.121 µg/L [0.110]	Low, 88.276 %Abs		0.300 - 5.000	Kit:25085(
AC46127	MICROCYSTINS ADDA 54	1.129 Abs	0.240 µg/L	Low, 77.862 %Abs		0.300 - 5.000	Kit:25085(
AC46127	MICROCYSTINS ADDA 54	1.122 Abs [1.1255] {0.4 C	0.246 µg/L [0.243]	Low, 77.379 %Abs		0.300 - 5.000	Kit:25085(
AC46128	MICROCYSTINS ADDA 54	1.210 Abs	0.172 µg/L	Low, 83.448 %Abs		0.300 - 5.000	Kit:25085(
AC46128	MICROCYSTINS ADDA 54	1.143 Abs [1.1765] {4.0 C	0.228 µg/L [0.200]	Low, 78.828 %Abs		0.300 - 5.000	Kit:25085(
AC46129	MICROCYSTINS ADDA 54	1.089 Abs	0.277 µg/L	Low, 75.103 %Abs		0.300 - 5.000	Kit:25085(
AC46129	MICROCYSTINS ADDA 54	1.034 Abs [1.0615] {3.7 C	0.334 µg/L [0.306]	71.310 %Abs [73.2		0.300 - 5.000	Kit:25085(
AC46130	MICROCYSTINS ADDA 54	1.275 Abs	0.124 µg/L	Low, 87.931 %Abs		0.300 - 5.000	Kit:25085(
AC46130	MICROCYSTINS ADDA 54	1.136 Abs [1.2055] {8.2 C	0.234 µg/L [0.179]	Low, 78.345 %Abs		0.300 - 5.000	Kit:25085(
AC46131	MICROCYSTINS ADDA 54	1.291 Abs	0.113 µg/L	Low, 89.034 %Abs		0.300 - 5.000	Kit:25085(
AC46131	MICROCYSTINS ADDA 54	1.370 Abs [1.3305] {4.2 C	0.060 µg/L [0.087]	Low, 94.483 %Abs		0.300 - 5.000	Kit:25085(
AC46132	MICROCYSTINS ADDA 54	1.103 Abs	0.264 µg/L	Low, 76.069 %Abs		0.300 - 5.000	Kit:25085(
AC46132	MICROCYSTINS ADDA 54	1.078 Abs [1.0905] {1.6 C	0.288 µg/L [0.276]	Low, 74.345 %Abs		0.300 - 5.000	Kit:25085(
AC46133	MICROCYSTINS ADDA 54	1.419 Abs	0.028 µg/L	Low, 97.862 %Abs		0.300 - 5.000	Kit:25085(
AC46133	MICROCYSTINS ADDA 54	1.411 Abs [1.4150] {0.4 C	0.033 µg/L [0.031]	Low, 97.310 %Abs		0.300 - 5.000	Kit:25085(
AC46134	MICROCYSTINS ADDA 54	1.441 Abs	0.013 µg/L	Low, 99.379 %Abs		0.300 - 5.000	Kit:25085(
AC46134	MICROCYSTINS ADDA 54	1.376 Abs [1.4085] {3.3 C	0.056 µg/L [0.035]	Low, 94.897 %Abs		0.300 - 5.000	Kit:25085(
AC46147 5X	MICROCYSTINS ADDA 54	0.612 Abs	6.400 µg/L	High, 42.207 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(
AC46147 5X	MICROCYSTINS ADDA 54	0.604 Abs [0.6080] {0.9 C	6.595 µg/L [6.498]	High, 41.655 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.888 Abs	0.525 µg/L	61.241 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.911 Abs [0.8995] {1.8 C	0.489 µg/L [0.507]	62.828 %Abs [62.0		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.474 Abs	0.000 µg/L	Low, 101.655 %Abs		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.479 Abs [1.4765] {0.2 C	0.000 µg/L [0.000]	Low, 102.000 %Abs		0.300 - 5.000	Kit:25085(

Note

Signature 

David Jordan 8/6/2025

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: Kit:2508506858

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
8/6/2025 4:04:30 PM					
MCT Std 0	1.456 Abs	0.001 µg/L	R^2=0.99768, 100.414 %Abs	RK1:23->A01@2	
MCT Std 0	1.443 Abs [1.4495] {0.6 CV}	0.011 µg/L [0.006] {117.9 CV}	R^2=0.99768, 99.517 %Abs	RK1:23->B01@2	
MCT Std 1	1.307 Abs	0.102 µg/L	R^2=0.99768, 90.138 %Abs	RK1:24->C01@2	
MCT Std 1	1.218 Abs [1.2625] {5.0 CV}	0.166 µg/L [0.134] {33.8 CV}	R^2=0.99768, 84.000 %Abs	RK1:24->D01@2	
MCT Std 2	0.971 Abs	0.407 µg/L	R^2=0.99768, 66.966 %Abs	RK1:25->E01@2	
MCT Std 2	0.928 Abs [0.9495] {3.2 CV}	0.465 µg/L [0.436] {9.4 CV}	R^2=0.99768, 64.000 %Abs	RK1:25->F01@3	
MCT Std 3	0.678 Abs	1.012 µg/L	R^2=0.99768, 46.759 %Abs	RK1:26->G01@3	
MCT Std 3	0.687 Abs [0.6825] {0.9 CV}	0.981 µg/L [0.997] {2.2 CV}	R^2=0.99768, 47.379 %Abs	RK1:26->H01@3	
MCT Std 4	0.525 Abs	1.839 µg/L	R^2=0.99768, 36.207 %Abs	RK1:27->A02@2	
MCT Std 4	0.536 Abs [0.5305] {1.5 CV}	1.748 µg/L [1.794] {3.6 CV}	R^2=0.99768, 36.966 %Abs	RK1:27->B02@2	
MCT Std 5	0.368 Abs	> 5.000 µg/L	25.379 %Abs	RK1:28->C02@2	
MCT Std 5	0.356 Abs [0.3620] {2.3 CV}	> 5.000 µg/L	24.552 %Abs	RK1:28->D02@2	

8/6/2025 4:04:30 PM					
MCT 546 LRB 1	1.350 Abs	0.073 µg/L	93.103 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.304 Abs [1.3270] {2.5 CV}	0.104 µg/L [0.089] {24.8 CV}	89.931 %Abs [91.517 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	1.028 Abs	0.340 µg/L	70.897 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	1.004 Abs [1.0160] {1.7 CV}	0.367 µg/L [0.354] {5.4 CV}	69.241 %Abs [70.069 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.899 Abs	0.508 µg/L	62.000 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.890 Abs [0.8945] {0.7 CV}	0.522 µg/L [0.515] {1.9 CV}	61.379 %Abs [61.690 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.4495	0.0060			
MCT Std 0 [SD]	0.0092	0.0071			
MCT Std 0 [%CV]	0.6342	117.8511			
MCT Std 1 [MEAN]	1.2625	0.1340			
MCT Std 1 [SD]	0.0629	0.0453			
MCT Std 1 [%CV]	4.9848	33.7723			
MCT Std 1 [%DIFF]		-10.6667			
MCT Std 2 [MEAN]	0.9495	0.4360			
MCT Std 2 [SD]	0.0304	0.0410			
MCT Std 2 [%CV]	3.2023	9.4065			
MCT Std 2 [%DIFF]		9.0000			
MCT Std 3 [MEAN]	0.6825	0.9965			
MCT Std 3 [SD]	0.0064	0.0219			
MCT Std 3 [%CV]	0.9324	2.1997			
MCT Std 3 [%DIFF]		-0.3500			
MCT Std 4 [MEAN]	0.5305	1.7935			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0078	0.0643			
MCT Std 4 [%CV]	1.4662	3.5878			
MCT Std 4 [%DIFF]		-10.3250			
MCT Std 5 [MEAN]	0.3620				
MCT Std 5 [SD]	0.0085				
MCT Std 5 [%CV]	2.3440				
MCT 546 LRB 1 [MEAN]	1.3270	0.0885			
MCT 546 LRB 1 [SD]	0.0325	0.0219			
MCT 546 LRB 1 [%CV]	2.4512	24.7687			
MCT 546 Low-CV [MEAN]	1.0160	0.3535			
MCT 546 Low-CV [SD]	0.0170	0.0191			
MCT 546 Low-CV [%CV]	1.6703	5.4008			
MCT 546 LFB 1 [MEAN]	0.8945	0.5150			
MCT 546 LFB 1 [SD]	0.0064	0.0099			
MCT 546 LFB 1 [%CV]	0.7115	1.9222			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.4572
B = 1.1356
C = 0.54895
D = 0.28872
R2 coef = 0.99768
50% = 0.866

