



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45921	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/21/2025	7/23/2025	< 0.30
AC45922	Cagles Mill Lake - Lieber SRA Beach	7/21/2025	7/23/2025	< 0.30
AC45923	Brookville Lake - Quakertown SRA Beach	7/22/2025	7/23/2025	< 0.30
AC45924	Brookville Lake - Mounds SRA Beach	7/22/2025	7/23/2025	0.32
AC45925	Hardy Lake SRA - Hardy Lake SRA Beach	7/22/2025	7/23/2025	< 0.30
AC45926	Brookville Lake - Quakertown SRA Beach (Field Dup.)	7/22/2025	7/23/2025	< 0.30
AC45927	Field Blank	7/22/2025	7/23/2025	< 0.30
AC45928	Ft. Ben Harrison SP Dog Lake	7/21/2025	7/23/2025	< 0.30

Test Information								
Request: 7/23/2025 2:57:51 PM								
Date: 7/23/2025								
Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#	
MCT Std 0	MICROCYSTINS ADDA 54	1.579 Abs	0.000 µg/L	R^2=0.99599, 100.7		0.000	Kit:25085(	
MCT Std 0	MICROCYSTINS ADDA 54	1.554 Abs [1.5665] {1.1 C	0.011 µg/L [0.006]	R^2=0.99599, 99.17		0.000	Kit:25085(	
MCT Std 1	MICROCYSTINS ADDA 54	1.311 Abs	0.152 µg/L	R^2=0.99599, 83.66		0.150	Kit:25085(	
MCT Std 1	MICROCYSTINS ADDA 54	1.311 Abs [1.3110] {0.0 C	0.152 µg/L [0.152]	R^2=0.99599, 83.66		0.150	Kit:25085(	
MCT Std 2	MICROCYSTINS ADDA 54	1.011 Abs	0.385 µg/L	R^2=0.99599, 64.51		0.400	Kit:25085(	
MCT Std 2	MICROCYSTINS ADDA 54	1.014 Abs [1.0125] {0.2 C	0.382 µg/L [0.384]	R^2=0.99599, 64.71		0.400	Kit:25085(	
MCT Std 3	MICROCYSTINS ADDA 54	0.591 Abs	1.305 µg/L	R^2=0.99599, 37.71		1.000	Kit:25085(	
MCT Std 3	MICROCYSTINS ADDA 54	0.661 Abs [0.6260] {7.9 C	1.020 µg/L [1.163]	R^2=0.99599, 42.18		1.000	Kit:25085(	
MCT Std 4	MICROCYSTINS ADDA 54	0.545 Abs	1.573 µg/L	R^2=0.99599, 34.78		2.000	Kit:25085(	
MCT Std 4	MICROCYSTINS ADDA 54	0.539 Abs [0.5420] {0.8 C	1.615 µg/L [1.594]	R^2=0.99599, 34.38		2.000	Kit:25085(	
MCT Std 5	MICROCYSTINS ADDA 54	0.364 Abs	> 5.000 µg/L	23.229 %Abs		5.000	Kit:25085(	
MCT Std 5	MICROCYSTINS ADDA 54	0.360 Abs [0.3620] {0.8 C	> 5.000 µg/L	22.974 %Abs		5.000	Kit:25085(	
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.448 Abs	0.073 µg/L	92.406 %Abs			Kit:25085(	
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.498 Abs [1.4730] {2.4 C	0.045 µg/L [0.059]	95.597 %Abs [94.0			Kit:25085(	
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.991 Abs	0.406 µg/L	63.242 %Abs			Kit:25085(	
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.989 Abs [0.9900] {0.1 C	0.409 µg/L [0.408]	63.114 %Abs [63.1			Kit:25085(	
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.998 Abs	0.399 µg/L	63.689 %Abs			Kit:25085(	
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.947 Abs [0.9725] {3.7 C	0.456 µg/L [0.428]	60.434 %Abs [62.0			Kit:25085(	

Note

Signature

David Jordan

David Jordan 7/23/2025

* 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) 7/23/2025 3:06:15 PM

Test Report (by Request)

Test Information

Request: 7/23/2025 2:58:47 PM
Date: 7/23/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC45921	MICROCYSTINS ADDA 54	1.321 Abs	0.146 µg/L	Low, 84.301 %Abs		0.300 - 5.000	Kit:25085(
AC45921	MICROCYSTINS ADDA 54	1.316 Abs [1.3185] {0.3 C	0.149 µg/L [0.148]	Low, 83.982 %Abs		0.300 - 5.000	Kit:25085(
AC45922	MICROCYSTINS ADDA 54	1.347 Abs	0.131 µg/L	Low, 85.960 %Abs		0.300 - 5.000	Kit:25085(
AC45922	MICROCYSTINS ADDA 54	1.387 Abs [1.3670] {2.1 C	0.107 µg/L [0.119]	Low, 88.513 %Abs		0.300 - 5.000	Kit:25085(
AC45922MS	MICROCYSTINS ADDA 54	0.743 Abs	0.793 µg/L	47.415 %Abs		0.300 - 5.000	Kit:25085(
AC45922MS	MICROCYSTINS ADDA 54	0.767 Abs [0.7550] {2.2 C	0.740 µg/L [0.767]	48.947 %Abs [48.1		0.300 - 5.000	Kit:25085(
AC45922MSD	MICROCYSTINS ADDA 54	0.904 Abs	0.510 µg/L	57.690 %Abs		0.300 - 5.000	Kit:25085(
AC45922MSD	MICROCYSTINS ADDA 54	0.873 Abs [0.8885] {2.5 C	0.554 µg/L [0.532]	55.712 %Abs [56.7		0.300 - 5.000	Kit:25085(
AC45923	MICROCYSTINS ADDA 54	1.215 Abs	0.215 µg/L	Low, 77.537 %Abs		0.300 - 5.000	Kit:25085(
AC45923	MICROCYSTINS ADDA 54	1.200 Abs [1.2075] {0.9 C	0.225 µg/L [0.220]	Low, 76.579 %Abs		0.300 - 5.000	Kit:25085(
AC45924	MICROCYSTINS ADDA 54	1.093 Abs	0.309 µg/L	69.751 %Abs		0.300 - 5.000	Kit:25085(
AC45924	MICROCYSTINS ADDA 54	1.079 Abs [1.0860] {0.9 C	0.321 µg/L [0.315]	68.858 %Abs [69.3		0.300 - 5.000	Kit:25085(
AC45925	MICROCYSTINS ADDA 54	1.185 Abs	0.236 µg/L	Low, 75.622 %Abs		0.300 - 5.000	Kit:25085(
AC45925	MICROCYSTINS ADDA 54	1.250 Abs [1.2175] {3.8 C	0.191 µg/L [0.214]	Low, 79.770 %Abs		0.300 - 5.000	Kit:25085(
AC45926	MICROCYSTINS ADDA 54	1.263 Abs	0.182 µg/L	Low, 80.600 %Abs		0.300 - 5.000	Kit:25085(
AC45926	MICROCYSTINS ADDA 54	1.244 Abs [1.2535] {1.1 C	0.195 µg/L [0.189]	Low, 79.387 %Abs		0.300 - 5.000	Kit:25085(
AC45927	MICROCYSTINS ADDA 54	1.476 Abs	0.058 µg/L	Low, 94.193 %Abs		0.300 - 5.000	Kit:25085(
AC45927	MICROCYSTINS ADDA 54	1.513 Abs [1.4945] {1.8 C	0.037 µg/L [0.048]	Low, 96.554 %Abs		0.300 - 5.000	Kit:25085(
AC45928	MICROCYSTINS ADDA 54	1.416 Abs	0.091 µg/L	Low, 90.364 %Abs		0.300 - 5.000	Kit:25085(
AC45928	MICROCYSTINS ADDA 54	1.363 Abs [1.3895] {2.7 C	0.121 µg/L [0.106]	Low, 86.981 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.863 Abs	0.569 µg/L	55.073 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.844 Abs [0.8535] {1.6 C	0.598 µg/L [0.584]	53.861 %Abs [54.4		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.475 Abs	0.058 µg/L	Low, 94.129 %Abs		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.429 Abs [1.4520] {2.2 C	0.084 µg/L [0.071]	Low, 91.193 %Abs		0.300 - 5.000	Kit:25085(

Note

Signature

David Jordan

David Jordan 7/23/2025

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	
7/23/2025 2:57:51 PM					
MCT Std 0	1.579 Abs	0.000 µg/L	R^2=0.99599, 100.766 %Abs	RK1:23->A01@2	
MCT Std 0	1.554 Abs [1.5665] {1.1 CV}	0.011 µg/L [0.006] {141.4 CV}	R^2=0.99599, 99.170 %Abs	RK1:23->B01@2	
MCT Std 1	1.311 Abs	0.152 µg/L	R^2=0.99599, 83.663 %Abs	RK1:24->C01@2	
MCT Std 1	1.311 Abs [1.3110] {0.0 CV}	0.152 µg/L [0.152] {0.0 CV}	R^2=0.99599, 83.663 %Abs	RK1:24->D01@2	
MCT Std 2	1.011 Abs	0.385 µg/L	R^2=0.99599, 64.518 %Abs	RK1:25->E01@2	
MCT Std 2	1.014 Abs [1.0125] {0.2 CV}	0.382 µg/L [0.384] {0.6 CV}	R^2=0.99599, 64.710 %Abs	RK1:25->F01@3	
MCT Std 3	0.591 Abs	1.305 µg/L	R^2=0.99599, 37.715 %Abs	RK1:26->G01@3	
MCT Std 3	0.661 Abs [0.6260] {7.9 CV}	1.020 µg/L [1.163] {17.3 CV}	R^2=0.99599, 42.183 %Abs	RK1:26->H01@3	
MCT Std 4	0.545 Abs	1.573 µg/L	R^2=0.99599, 34.780 %Abs	RK1:27->A02@2	
MCT Std 4	0.539 Abs [0.5420] {0.8 CV}	1.615 µg/L [1.594] {1.9 CV}	R^2=0.99599, 34.397 %Abs	RK1:27->B02@2	
MCT Std 5	0.364 Abs	> 5.000 µg/L	23.229 %Abs	RK1:28->C02@2	
MCT Std 5	0.360 Abs [0.3620] {0.8 CV}	> 5.000 µg/L	22.974 %Abs	RK1:28->D02@2	

7/23/2025 2:57:51 PM					
MCT 546 LRB 1	1.448 Abs	0.073 µg/L	92.406 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.498 Abs [1.4730] {2.4 CV}	0.045 µg/L [0.059] {33.6 CV}	95.597 %Abs [94.001 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.991 Abs	0.406 µg/L	63.242 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.989 Abs [0.9900] {0.1 CV}	0.409 µg/L [0.408] {0.5 CV}	63.114 %Abs [63.178 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.998 Abs	0.399 µg/L	63.689 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.947 Abs [0.9725] {3.7 CV}	0.456 µg/L [0.428] {9.4 CV}	60.434 %Abs [62.061 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.5665	0.0055			
MCT Std 0 [SD]	0.0177	0.0078			
MCT Std 0 [%CV]	1.1285	141.4214			
MCT Std 1 [MEAN]	1.3110	0.1520			
MCT Std 1 [SD]	0.0000	0.0000			
MCT Std 1 [%CV]	0.0000	0.0000			
MCT Std 1 [%DIFF]		1.3333			
MCT Std 2 [MEAN]	1.0125	0.3835			
MCT Std 2 [SD]	0.0021	0.0021			
MCT Std 2 [%CV]	0.2095	0.5531			
MCT Std 2 [%DIFF]		-4.1250			
MCT Std 3 [MEAN]	0.6260	1.1625			
MCT Std 3 [SD]	0.0495	0.2015			
MCT Std 3 [%CV]	7.9069	17.3355			
MCT Std 3 [%DIFF]		16.2500			
MCT Std 4 [MEAN]	0.5420	1.5940			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0042	0.0297			
MCT Std 4 [%CV]	0.7828	1.8631			
MCT Std 4 [%DIFF]		-20.3000			
MCT Std 5 [MEAN]	0.3620				
MCT Std 5 [SD]	0.0028				
MCT Std 5 [%CV]	0.7813				
MCT 546 LRB 1 [MEAN]	1.4730	0.0590			
MCT 546 LRB 1 [SD]	0.0354	0.0198			
MCT 546 LRB 1 [%CV]	2.4002	33.5576			
MCT 546 Low-CV [MEAN]	0.9900	0.4075			
MCT 546 Low-CV [SD]	0.0014	0.0021			
MCT 546 Low-CV [%CV]	0.1428	0.5206			
MCT 546 LFB 1 [MEAN]	0.9725	0.4275			
MCT 546 LFB 1 [SD]	0.0361	0.0403			
MCT 546 LFB 1 [%CV]	3.7082	9.4281			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.5672
B = 1.2203
C = 0.46304
D = 0.31521
R2 coef = 0.99599
50% = 0.706

