



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45783	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/7/2025	7/9/2025	< 0.30
AC45784	Cagles Mill Lake - Lieber SRA Beach	7/7/2025	7/9/2025	< 0.30
AC45785	Monroe Lake - Fairfax SRA Beach	7/7/2025	7/9/2025	< 0.30
AC45786	Monroe Lake - Paynetown SRA Beach	7/7/2025	7/9/2025	< 0.30
AC45787	Starve Hollow SRA - Starve Hollow Lake Beach	7/7/2025	7/9/2025	< 0.30
AC45788	Whitewater Memorial SP - Whitewater Lake Beach	7/8/2025	7/9/2025	0.37
AC45789	Brookville Lake - Quakertown SRA Beach	7/8/2025	7/9/2025	< 0.30
AC45790	Brookville Lake - Mounds SRA Beach	7/8/2025	7/9/2025	< 0.30
AC45791	Hardy Lake SRA - Hardy Lake SRA Beach	7/8/2025	7/9/2025	< 0.30
AC45792	Deam Lake SRA - Deam Lake Beach	7/8/2025	7/9/2025	< 0.30
AC45793	Hardy Lake SRA - Hardy Lake SRA Beach (Field Duplicate)	7/8/2025	7/9/2025	< 0.30
AC45794	Field Blank	7/8/2025	7/9/2025	< 0.30
AC45795	Ft. Ben Harrison SP Dog Lake	7/7/2025	7/9/2025	< 0.30

Test Report (by Request)

Test Information

Request: 7/9/2025 3:17:14 PM
Date: 7/9/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.403 Abs	0.000 µg/L	R^2=0.99514, 103.1		0.000	Kit:25085(
MCT Std 0	MICROCYSTINS ADDA 54	1.316 Abs [1.3595] {4.5 C	0.070 µg/L [0.035]	R^2=0.99514, 96.76		0.000	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.237 Abs	0.138 µg/L	R^2=0.99514, 90.95		0.150	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.237 Abs [1.2370] {0.0 C	0.138 µg/L [0.138]	R^2=0.99514, 90.95		0.150	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	0.951 Abs	0.387 µg/L	R^2=0.99514, 69.92		0.400	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	0.915 Abs [0.9330] {2.7 C	0.426 µg/L [0.407]	R^2=0.99514, 67.27		0.400	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.585 Abs	1.064 µg/L	R^2=0.99514, 43.01		1.000	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.573 Abs [0.5790] {1.5 C	1.109 µg/L [1.087]	R^2=0.99514, 42.13		1.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.510 Abs	1.414 µg/L	R^2=0.99514, 37.50		2.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.475 Abs [0.4925] {5.0 C	1.665 µg/L [1.540]	R^2=0.99514, 34.92		2.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.320 Abs	> 5.000 µg/L	23.529 %Abs		5.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.330 Abs [0.3250] {2.2 C	> 5.000 µg/L	24.265 %Abs		5.000	Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.222 Abs	0.150 µg/L	89.853 %Abs			Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.250 Abs [1.2360] {1.6 C	0.127 µg/L [0.139]	91.912 %Abs [90.8			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.993 Abs	0.345 µg/L	73.015 %Abs			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.021 Abs [1.0070] {2.0 C	0.319 µg/L [0.332]	75.074 %Abs [74.0			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.864 Abs	0.487 µg/L	63.529 %Abs			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.846 Abs [0.8550] {1.5 C	0.510 µg/L [0.499]	62.206 %Abs [62.8			Kit:25085(

Note

Signature

David Jordan

Test Information							
Request: 7/9/2025 3:18:32 PM							
Date: 7/9/2025							
Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
QCS 546	MICROCYSTINS ADDA 54	0.773 Abs	0.616 µg/L	56.838 %Abs		0.300 - 5.000	Kit:25085(
QCS 546	MICROCYSTINS ADDA 54	0.769 Abs [0.7710] {0.4 C	0.622 µg/L [0.619]	56.544 %Abs [56.6		0.300 - 5.000	Kit:25085(
AC45783	MICROCYSTINS ADDA 54	1.213 Abs	0.157 µg/L	Low, 89.191 %Abs		0.300 - 5.000	Kit:25085(
AC45783	MICROCYSTINS ADDA 54	1.190 Abs [1.2015] {1.4 C	0.175 µg/L [0.166]	Low, 87.500 %Abs		0.300 - 5.000	Kit:25085(
AC45784	MICROCYSTINS ADDA 54	1.165 Abs	0.195 µg/L	Low, 85.662 %Abs		0.300 - 5.000	Kit:25085(
AC45784	MICROCYSTINS ADDA 54	1.222 Abs [1.1935] {3.4 C	0.150 µg/L [0.173]	Low, 89.853 %Abs		0.300 - 5.000	Kit:25085(
AC45785	MICROCYSTINS ADDA 54	1.375 Abs	0.000 µg/L	Low, 101.103 %Abs		0.300 - 5.000	Kit:25085(
AC45785	MICROCYSTINS ADDA 54	1.336 Abs [1.3555] {2.0 C	0.050 µg/L [0.025]	Low, 98.235 %Abs		0.300 - 5.000	Kit:25085(
AC45786	MICROCYSTINS ADDA 54	1.287 Abs	0.096 µg/L	Low, 94.632 %Abs		0.300 - 5.000	Kit:25085(
AC45786	MICROCYSTINS ADDA 54	1.293 Abs [1.2900] {0.3 C	0.091 µg/L [0.094]	Low, 95.074 %Abs		0.300 - 5.000	Kit:25085(
AC45787	MICROCYSTINS ADDA 54	1.179 Abs	0.184 µg/L	Low, 86.691 %Abs		0.300 - 5.000	Kit:25085(
AC45787	MICROCYSTINS ADDA 54	1.207 Abs [1.1930] {1.7 C	0.162 µg/L [0.173]	Low, 88.750 %Abs		0.300 - 5.000	Kit:25085(
AC45787MS	MICROCYSTINS ADDA 54	0.800 Abs	0.574 µg/L	58.824 %Abs		0.300 - 5.000	Kit:25085(
AC45787MS	MICROCYSTINS ADDA 54	0.797 Abs [0.7985] {0.3 C	0.579 µg/L [0.577]	58.603 %Abs [58.7		0.300 - 5.000	Kit:25085(
AC45787MSD	MICROCYSTINS ADDA 54	0.852 Abs	0.502 µg/L	62.647 %Abs		0.300 - 5.000	Kit:25085(
AC45787MSD	MICROCYSTINS ADDA 54	0.844 Abs [0.8480] {0.7 C	0.512 µg/L [0.507]	62.059 %Abs [62.3		0.300 - 5.000	Kit:25085(
AC45788	MICROCYSTINS ADDA 54	0.970 Abs	0.368 µg/L	71.324 %Abs		0.300 - 5.000	Kit:25085(
AC45788	MICROCYSTINS ADDA 54	0.966 Abs [0.9680] {0.3 C	0.372 µg/L [0.370]	71.029 %Abs [71.1		0.300 - 5.000	Kit:25085(
AC45789	MICROCYSTINS ADDA 54	1.089 Abs	0.258 µg/L	Low, 80.074 %Abs		0.300 - 5.000	Kit:25085(
AC45789	MICROCYSTINS ADDA 54	1.067 Abs [1.0780] {1.4 C	0.277 µg/L [0.268]	Low, 78.456 %Abs		0.300 - 5.000	Kit:25085(
AC45790	MICROCYSTINS ADDA 54	1.063 Abs	0.281 µg/L	Low, 78.162 %Abs		0.300 - 5.000	Kit:25085(
AC45790	MICROCYSTINS ADDA 54	1.075 Abs [1.0690] {0.8 C	0.270 µg/L [0.276]	Low, 79.044 %Abs		0.300 - 5.000	Kit:25085(
AC45791	MICROCYSTINS ADDA 54	1.145 Abs	0.212 µg/L	Low, 84.191 %Abs		0.300 - 5.000	Kit:25085(
AC45791	MICROCYSTINS ADDA 54	1.180 Abs [1.1625] {2.1 C	0.183 µg/L [0.198]	Low, 86.765 %Abs		0.300 - 5.000	Kit:25085(
AC45792	MICROCYSTINS ADDA 54	1.204 Abs	0.164 µg/L	Low, 88.529 %Abs		0.300 - 5.000	Kit:25085(
AC45792	MICROCYSTINS ADDA 54	1.250 Abs [1.2270] {2.7 C	0.127 µg/L [0.146]	Low, 91.912 %Abs		0.300 - 5.000	Kit:25085(
AC45793	MICROCYSTINS ADDA 54	1.140 Abs	0.216 µg/L	Low, 83.824 %Abs		0.300 - 5.000	Kit:25085(
AC45793	MICROCYSTINS ADDA 54	1.193 Abs [1.1665] {3.2 C	0.173 µg/L [0.195]	Low, 87.721 %Abs		0.300 - 5.000	Kit:25085(
AC45794	MICROCYSTINS ADDA 54	1.288 Abs	0.095 µg/L	Low, 94.706 %Abs		0.300 - 5.000	Kit:25085(
AC45794	MICROCYSTINS ADDA 54	1.273 Abs [1.2805] {0.8 C	0.108 µg/L [0.102]	Low, 93.603 %Abs		0.300 - 5.000	Kit:25085(
AC45795	MICROCYSTINS ADDA 54	1.348 Abs	0.036 µg/L	Low, 99.118 %Abs		0.300 - 5.000	Kit:25085(
AC45795	MICROCYSTINS ADDA 54	1.298 Abs [1.3230] {2.7 C	0.086 µg/L [0.061]	Low, 95.441 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.857 Abs	0.495 µg/L	63.015 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.839 Abs [0.8480] {1.5 C	0.519 µg/L [0.507]	61.691 %Abs [62.3		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.375 Abs	0.000 µg/L	Low, 101.103 %Abs		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.339 Abs [1.3570] {1.9 C	0.046 µg/L [0.023]	Low, 98.456 %Abs		0.300 - 5.000	Kit:25085(

Note

Signature

David Jordan

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	
7/9/2025 3:17:14 PM					
MCT Std 0	1.403 Abs	0.000 µg/L	R ² =0.99514, 103.162 %Abs	RK1:23->A01@2	
MCT Std 0	1.316 Abs [1.3595] {4.5 CV}	0.070 µg/L [0.035] {141.4 CV}	R ² =0.99514, 96.765 %Abs	RK1:23->B01@2	
MCT Std 1	1.237 Abs	0.138 µg/L	R ² =0.99514, 90.956 %Abs	RK1:24->C01@2	
MCT Std 1	1.237 Abs [1.2370] {0.0 CV}	0.138 µg/L [0.138] {0.0 CV}	R ² =0.99514, 90.956 %Abs	RK1:24->D01@2	
MCT Std 2	0.951 Abs	0.387 µg/L	R ² =0.99514, 69.926 %Abs	RK1:25->E01@2	
MCT Std 2	0.915 Abs [0.9330] {2.7 CV}	0.426 µg/L [0.407] {6.8 CV}	R ² =0.99514, 67.279 %Abs	RK1:25->F01@3	
MCT Std 3	0.585 Abs	1.064 µg/L	R ² =0.99514, 43.015 %Abs	RK1:26->G01@3	
MCT Std 3	0.573 Abs [0.5790] {1.5 CV}	1.109 µg/L [1.087] {2.9 CV}	R ² =0.99514, 42.132 %Abs	RK1:26->H01@3	
MCT Std 4	0.510 Abs	1.414 µg/L	R ² =0.99514, 37.500 %Abs	RK1:27->A02@2	
MCT Std 4	0.475 Abs [0.4925] {5.0 CV}	1.665 µg/L [1.540] {11.5 CV}	R ² =0.99514, 34.926 %Abs	RK1:27->B02@2	
MCT Std 5	0.320 Abs	> 5.000 µg/L	23.529 %Abs	RK1:28->C02@2	
MCT Std 5	0.330 Abs [0.3250] {2.2 CV}	> 5.000 µg/L	24.265 %Abs	RK1:28->D02@2	

7/9/2025 3:17:14 PM					
MCT 546 LRB 1	1.222 Abs	0.150 µg/L	89.853 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.250 Abs [1.2360] {1.6 CV}	0.127 µg/L [0.139] {11.7 CV}	91.912 %Abs [90.882 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.993 Abs	0.345 µg/L	73.015 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	1.021 Abs [1.0070] {2.0 CV}	0.319 µg/L [0.332] {5.5 CV}	75.074 %Abs [74.044 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.864 Abs	0.487 µg/L	63.529 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.846 Abs [0.8550] {1.5 CV}	0.510 µg/L [0.499] {3.3 CV}	62.206 %Abs [62.868 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.3595	0.0350			
MCT Std 0 [SD]	0.0615	0.0495			
MCT Std 0 [%CV]	4.5251	141.4214			
MCT Std 1 [MEAN]	1.2370	0.1380			
MCT Std 1 [SD]	0.0000	0.0000			
MCT Std 1 [%CV]	0.0000	0.0000			
MCT Std 1 [%DIFF]		-8.0000			
MCT Std 2 [MEAN]	0.9330	0.4065			
MCT Std 2 [SD]	0.0255	0.0276			
MCT Std 2 [%CV]	2.7284	6.7841			
MCT Std 2 [%DIFF]		1.6250			
MCT Std 3 [MEAN]	0.5790	1.0865			
MCT Std 3 [SD]	0.0085	0.0318			
MCT Std 3 [%CV]	1.4655	2.9286			
MCT Std 3 [%DIFF]		8.6500			
MCT Std 4 [MEAN]	0.4925	1.5395			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0247	0.1775			
MCT Std 4 [%CV]	5.0251	11.5287			
MCT Std 4 [%DIFF]		-23.0250			
MCT Std 5 [MEAN]	0.3250				
MCT Std 5 [SD]	0.0071				
MCT Std 5 [%CV]	2.1757				
MCT 546 LRB 1 [MEAN]	1.2360	0.1385			
MCT 546 LRB 1 [SD]	0.0198	0.0163			
MCT 546 LRB 1 [%CV]	1.6019	11.7426			
MCT 546 Low-CV [MEAN]	1.0070	0.3320			
MCT 546 Low-CV [SD]	0.0198	0.0184			
MCT 546 Low-CV [%CV]	1.9661	5.5376			
MCT 546 LFB 1 [MEAN]	0.8550	0.4985			
MCT 546 LFB 1 [SD]	0.0127	0.0163			
MCT 546 LFB 1 [%CV]	1.4886	3.2625			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.3683
B = 1.4761
C = 0.51383
D = 0.31741
R2 coef = 0.99514
50% = 0.793

