



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45225	Cecil M. Harden Lake - Raccoon Lake SRA Beach	5/27/2025	5/28/2025	< 0.30
AC45226	Whitewater Memorial SP - Whitewater Lake Beach	5/27/2025	5/28/2025	0.35
AC45227	Brookville Lake - Quakertown SRA Beach	5/27/2025	5/28/2025	< 0.30
AC45228	Whitewater Memorial SP - Whitewater Lake Beach (Field Duplicate)	5/27/2025	5/28/2025	0.44
AC45229	Field Blank	5/27/2025	5/28/2025	< 0.30
AC45243	Ouabache SP - Kunkel Lake Beach	5/27/2025	5/28/2025	< 0.30

Test Report (by Request)

Test Information

Request: 5/28/2025 2:32:20 PM
Date: 5/28/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.173 Abs	0.030 µg/L	R^2=0.99870, 98.07		0.000	Kit:24044(
MCT Std 0	MICROCYSTINS ADDA 54	1.218 Abs [1.1955] {2.7 C	0.000 µg/L [0.015]	R^2=0.99870, 101.8		0.000	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	1.037 Abs	0.140 µg/L	R^2=0.99870, 86.70		0.150	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	1.039 Abs [1.0380] {0.1 C	0.139 µg/L [0.140]	R^2=0.99870, 86.87		0.150	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.779 Abs	0.399 µg/L	R^2=0.99870, 65.13		0.400	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.752 Abs [0.7655] {2.5 C	0.436 µg/L [0.418]	R^2=0.99870, 62.87		0.400	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.506 Abs	0.990 µg/L	R^2=0.99870, 42.30		1.000	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.491 Abs [0.4985] {2.1 C	1.049 µg/L [1.020]	R^2=0.99870, 41.05		1.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.370 Abs	1.835 µg/L	R^2=0.99870, 30.93		2.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.382 Abs [0.3760] {2.3 C	1.716 µg/L [1.776]	R^2=0.99870, 31.94		2.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.249 Abs	> 5.000 µg/L	20.819 %Abs		5.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.240 Abs [0.2445] {2.6 C	> 5.000 µg/L	20.067 %Abs		5.000	Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.096 Abs	0.093 µg/L	91.639 %Abs			Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.113 Abs [1.1045] {1.1 C	0.080 µg/L [0.087]	93.060 %Abs [92.3			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.803 Abs	0.369 µg/L	67.140 %Abs			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.808 Abs [0.8055] {0.4 C	0.363 µg/L [0.366]	67.559 %Abs [67.3			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.692 Abs	0.528 µg/L	57.860 %Abs			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.703 Abs [0.6975] {1.1 C	0.510 µg/L [0.519]	58.779 %Abs [58.3			Kit:24044(

Note

Signature

David Jordan

David Jordan 5/28/2025

Test Information							
Request: 5/28/2025 2:32:55 PM							
Date: 5/28/2025							
Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC45225	MICROCYSTINS ADDA 54	1.027 Abs	0.148 µg/L	Low, 85.870 %Abs		0.300 - 5.000	Kit:24044(
AC45225	MICROCYSTINS ADDA 54	1.016 Abs [1.0215] {0.8 C	0.157 µg/L [0.153]	Low, 84.950 %Abs		0.300 - 5.000	Kit:24044(
AC45225MS	MICROCYSTINS ADDA 54	0.566 Abs	0.798 µg/L	47.324 %Abs		0.300 - 5.000	Kit:24044(
AC45225MS	MICROCYSTINS ADDA 54	0.559 Abs [0.5625] {0.9 C	0.818 µg/L [0.808]	46.739 %Abs [47.0		0.300 - 5.000	Kit:24044(
AC45225MSD	MICROCYSTINS ADDA 54	0.554 Abs	0.832 µg/L	46.321 %Abs		0.300 - 5.000	Kit:24044(
AC45225MSD	MICROCYSTINS ADDA 54	0.527 Abs [0.5405] {3.5 C	0.916 µg/L [0.874]	44.064 %Abs [45.1		0.300 - 5.000	Kit:24044(
AC45226	MICROCYSTINS ADDA 54	0.814 Abs	0.356 µg/L	68.060 %Abs		0.300 - 5.000	Kit:24044(
AC45226	MICROCYSTINS ADDA 54	0.833 Abs [0.8235] {1.6 C	0.333 µg/L [0.345]	69.649 %Abs [68.8		0.300 - 5.000	Kit:24044(
AC45227	MICROCYSTINS ADDA 54	0.996 Abs	0.174 µg/L	Low, 83.278 %Abs		0.300 - 5.000	Kit:24044(
AC45227	MICROCYSTINS ADDA 54	1.038 Abs [1.0170] {2.9 C	0.139 µg/L [0.157]	Low, 86.789 %Abs		0.300 - 5.000	Kit:24044(
AC45228	MICROCYSTINS ADDA 54	0.753 Abs	0.434 µg/L	62.960 %Abs		0.300 - 5.000	Kit:24044(
AC45228	MICROCYSTINS ADDA 54	0.750 Abs [0.7515] {0.3 C	0.439 µg/L [0.437]	62.709 %Abs [62.8		0.300 - 5.000	Kit:24044(
AC45229	MICROCYSTINS ADDA 54	1.092 Abs	0.096 µg/L	Low, 91.304 %Abs		0.300 - 5.000	Kit:24044(
AC45229	MICROCYSTINS ADDA 54	1.149 Abs [1.1205] {3.6 C	0.051 µg/L [0.074]	Low, 96.070 %Abs		0.300 - 5.000	Kit:24044(
AC45243	MICROCYSTINS ADDA 54	1.121 Abs	0.073 µg/L	Low, 93.729 %Abs		0.300 - 5.000	Kit:24044(
AC45243	MICROCYSTINS ADDA 54	1.163 Abs [1.1420] {2.6 C	0.039 µg/L [0.056]	Low, 97.241 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.702 Abs	0.511 µg/L	58.696 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.685 Abs [0.6935] {1.7 C	0.540 µg/L [0.526]	57.274 %Abs [57.9		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.163 Abs	0.039 µg/L	Low, 97.241 %Abs		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.096 Abs [1.1295] {4.2 C	0.093 µg/L [0.066]	Low, 91.639 %Abs		0.300 - 5.000	Kit:24044(

Note

Signature

David Jordan

David Jordan 5/28/2025

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:2404401378

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
5/28/2025 2:32:20 PM					
MCT Std 0	1.173 Abs	0.030 µg/L	R^2=0.99870, 98.077 %Abs	RK1:23->A01@2	
MCT Std 0	1.218 Abs [1.1955] {2.7 CV}	0.000 µg/L [0.015] {141.4 CV}	R^2=0.99870, 101.839 %Abs	RK1:23->B01@2	
MCT Std 1	1.037 Abs	0.140 µg/L	R^2=0.99870, 86.706 %Abs	RK1:24->C01@2	
MCT Std 1	1.039 Abs [1.0380] {0.1 CV}	0.139 µg/L [0.140] {0.5 CV}	R^2=0.99870, 86.873 %Abs	RK1:24->D01@2	
MCT Std 2	0.779 Abs	0.399 µg/L	R^2=0.99870, 65.134 %Abs	RK1:25->E01@2	
MCT Std 2	0.752 Abs [0.7655] {2.5 CV}	0.436 µg/L [0.418] {6.3 CV}	R^2=0.99870, 62.876 %Abs	RK1:25->F01@3	
MCT Std 3	0.506 Abs	0.990 µg/L	R^2=0.99870, 42.308 %Abs	RK1:26->G01@3	
MCT Std 3	0.491 Abs [0.4985] {2.1 CV}	1.049 µg/L [1.020] {4.1 CV}	R^2=0.99870, 41.054 %Abs	RK1:26->H01@3	
MCT Std 4	0.370 Abs	1.835 µg/L	R^2=0.99870, 30.936 %Abs	RK1:27->A02@2	
MCT Std 4	0.382 Abs [0.3760] {2.3 CV}	1.716 µg/L [1.776] {4.7 CV}	R^2=0.99870, 31.940 %Abs	RK1:27->B02@2	
MCT Std 5	0.249 Abs	> 5.000 µg/L	20.819 %Abs	RK1:28->C02@2	
MCT Std 5	0.240 Abs [0.2445] {2.6 CV}	> 5.000 µg/L	20.067 %Abs	RK1:28->D02@2	

5/28/2025 2:32:20 PM					
MCT 546 LRB 1	1.096 Abs	0.093 µg/L	91.639 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.113 Abs [1.1045] {1.1 CV}	0.080 µg/L [0.087] {10.6 CV}	93.060 %Abs [92.349 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.803 Abs	0.369 µg/L	67.140 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.808 Abs [0.8055] {0.4 CV}	0.363 µg/L [0.366] {1.2 CV}	67.559 %Abs [67.349 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.692 Abs	0.528 µg/L	57.860 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.703 Abs [0.6975] {1.1 CV}	0.510 µg/L [0.519] {2.5 CV}	58.779 %Abs [58.319 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.1955	0.0150			
MCT Std 0 [SD]	0.0318	0.0212			
MCT Std 0 [%CV]	2.6616	141.4214			
MCT Std 1 [MEAN]	1.0380	0.1395			
MCT Std 1 [SD]	0.0014	0.0007			
MCT Std 1 [%CV]	0.1363	0.5069			
MCT Std 1 [%DIFF]		-7.0000			
MCT Std 2 [MEAN]	0.7655	0.4175			
MCT Std 2 [SD]	0.0191	0.0262			
MCT Std 2 [%CV]	2.4940	6.2666			
MCT Std 2 [%DIFF]		4.3750			
MCT Std 3 [MEAN]	0.4985	1.0195			
MCT Std 3 [SD]	0.0106	0.0417			
MCT Std 3 [%CV]	2.1277	4.0921			
MCT Std 3 [%DIFF]		1.9500			
MCT Std 4 [MEAN]	0.3760	1.7755			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0085	0.0841			
MCT Std 4 [%CV]	2.2567	4.7393			
MCT Std 4 [%DIFF]		-11.2250			
MCT Std 5 [MEAN]	0.2445				
MCT Std 5 [SD]	0.0064				
MCT Std 5 [%CV]	2.6028				
MCT 546 LRB 1 [MEAN]	1.1045	0.0865			
MCT 546 LRB 1 [SD]	0.0120	0.0092			
MCT 546 LRB 1 [%CV]	1.0884	10.6270			
MCT 546 Low-CV [MEAN]	0.8055	0.3660			
MCT 546 Low-CV [SD]	0.0035	0.0042			
MCT 546 Low-CV [%CV]	0.4389	1.1592			
MCT 546 LFB 1 [MEAN]	0.6975	0.5190			
MCT 546 LFB 1 [SD]	0.0078	0.0127			
MCT 546 LFB 1 [%CV]	1.1152	2.4524			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.2008
B = 1.2568
C = 0.51124
D = 0.20328
R2 coef = 0.99870
50% = 0.716

