



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC44204	Pokagon SP - Main Beach	5/19/2025	5/21/2025	< 0.30
AC44205	Pokagon SP - Potawatomi Inn Beach	5/19/2025	5/21/2025	< 0.30
AC44206	Chain O'Lakes SP - Sand Lake Beach	5/19/2025	5/21/2025	< 0.30
AC44207	Ouabache SP - Kunkel Lake Beach	5/19/2025	5/21/2025	< 0.30
AC44208	Potato Creek SP - Worster Lake Beach	5/20/2025	5/21/2025	0.39
AC44209	Mississinewa Lake - Miami SRA Beach	5/20/2025	5/21/2025	< 0.30
AC44210	Salamonie Lake - Lost Bridge West SRA Beach	5/20/2025	5/21/2025	< 0.30
AC44211	Summit Lake SP - Summit Lake Beach	5/20/2025	5/21/2025	< 0.30
AC44212	Potato Creek SP - Worster Lake Beach (Field Duplicate)	5/20/2025	5/21/2025	0.32
AC44213	Field Blank	5/20/2025	5/21/2025	< 0.30
AC44214	Lincoln SP - Lake Lincoln Beach	5/19/2025	5/21/2025	< 0.30
AC44215	Ferdinand State Forest - Ferdinand Lake Beach	5/19/2025	5/21/2025	< 0.30
AC44216	Patoka Lake - Newton Stewart SRA	5/19/2025	5/21/2025	< 0.30

Test Information

Request: 5/21/2025 2:36:45 PM
Date: 5/21/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.161 Abs	0.037 µg/L	R^2=0.99872, 98.47		0.000	Kit:24044(
MCT Std 0	MICROCYSTINS ADDA 54	1.197 Abs [1.1790] {2.2 C	0.000 µg/L [0.019]	R^2=0.99872, 101.5		0.000	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	1.062 Abs	0.135 µg/L	R^2=0.99872, 90.07		0.150	Kit:24044(
MCT Std 1	MICROCYSTINS ADDA 54	1.051 Abs [1.0565] {0.7 C	0.145 µg/L [0.140]	R^2=0.99872, 89.14		0.150	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.812 Abs	0.396 µg/L	R^2=0.99872, 68.87		0.400	Kit:24044(
MCT Std 2	MICROCYSTINS ADDA 54	0.790 Abs [0.8010] {1.9 C	0.424 µg/L [0.410]	R^2=0.99872, 67.00		0.400	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.530 Abs	0.975 µg/L	R^2=0.99872, 44.95		1.000	Kit:24044(
MCT Std 3	MICROCYSTINS ADDA 54	0.499 Abs [0.5145] {4.3 C	1.094 µg/L [1.035]	R^2=0.99872, 42.32		1.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.392 Abs	1.783 µg/L	R^2=0.99872, 33.24		2.000	Kit:24044(
MCT Std 4	MICROCYSTINS ADDA 54	0.395 Abs [0.3935] {0.5 C	1.753 µg/L [1.768]	R^2=0.99872, 33.50		2.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.273 Abs	> 5.000 µg/L	23.155 %Abs		5.000	Kit:24044(
MCT Std 5	MICROCYSTINS ADDA 54	0.263 Abs [0.2680] {2.6 C	> 5.000 µg/L	22.307 %Abs		5.000	Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.166 Abs	0.031 µg/L	98.897 %Abs			Kit:24044(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.165 Abs [1.1655] {0.1 C	0.032 µg/L [0.032]	98.813 %Abs [98.8			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.834 Abs	0.368 µg/L	70.738 %Abs			Kit:24044(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.804 Abs [0.8190] {2.6 C	0.406 µg/L [0.387]	68.193 %Abs [69.4			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.705 Abs	0.553 µg/L	59.796 %Abs			Kit:24044(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.707 Abs [0.7060] {0.2 C	0.549 µg/L [0.551]	59.966 %Abs [59.8			Kit:24044(

Note

Signature

David Jordan

David Jordan 5/21/2025

Request: 5/21/2025 2:38:01 PM
Date: 5/21/2025

Note

Signature David Jordan

David Jordan 5/21/2025

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	
5/21/2025 2:36:45 PM					
MCT Std 0	1.161 Abs	0.037 µg/L	R ² =0.99872, 98.473 %Abs	RK1:23->A01@2	
MCT Std 0	1.197 Abs [1.1790] {2.2 CV}	0.000 µg/L [0.019] {141.4 CV}	R ² =0.99872, 101.527 %Abs	RK1:23->B01@2	
MCT Std 1	1.062 Abs	0.135 µg/L	R ² =0.99872, 90.076 %Abs	RK1:24->C01@2	
MCT Std 1	1.051 Abs [1.0565] {0.7 CV}	0.145 µg/L [0.140] {5.1 CV}	R ² =0.99872, 89.143 %Abs	RK1:24->D01@2	
MCT Std 2	0.812 Abs	0.396 µg/L	R ² =0.99872, 68.872 %Abs	RK1:25->E01@2	
MCT Std 2	0.790 Abs [0.8010] {1.9 CV}	0.424 µg/L [0.410] {4.8 CV}	R ² =0.99872, 67.006 %Abs	RK1:25->F01@3	
MCT Std 3	0.530 Abs	0.975 µg/L	R ² =0.99872, 44.953 %Abs	RK1:26->G01@3	
MCT Std 3	0.499 Abs [0.5145] {4.3 CV}	1.094 µg/L [1.035] {8.1 CV}	R ² =0.99872, 42.324 %Abs	RK1:26->H01@3	
MCT Std 4	0.392 Abs	1.783 µg/L	R ² =0.99872, 33.249 %Abs	RK1:27->A02@2	
MCT Std 4	0.395 Abs [0.3935] {0.5 CV}	1.753 µg/L [1.768] {1.2 CV}	R ² =0.99872, 33.503 %Abs	RK1:27->B02@2	
MCT Std 5	0.273 Abs	> 5.000 µg/L	23.155 %Abs	RK1:28->C02@2	
MCT Std 5	0.263 Abs [0.2680] {2.6 CV}	> 5.000 µg/L	22.307 %Abs	RK1:28->D02@2	

5/21/2025 2:36:45 PM					
MCT 546 LRB 1	1.166 Abs	0.031 µg/L	98.897 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.165 Abs [1.1655] {0.1 CV}	0.032 µg/L [0.032] {2.2 CV}	98.813 %Abs [98.855 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.834 Abs	0.368 µg/L	70.738 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.804 Abs [0.8190] {2.6 CV}	0.406 µg/L [0.387] {6.9 CV}	68.193 %Abs [69.466 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.705 Abs	0.553 µg/L	59.796 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.707 Abs [0.7060] {0.2 CV}	0.549 µg/L [0.551] {0.5 CV}	59.966 %Abs [59.881 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.1790	0.0185			
MCT Std 0 [SD]	0.0255	0.0262			
MCT Std 0 [%CV]	2.1591	141.4214			
MCT Std 1 [MEAN]	1.0565	0.1400			
MCT Std 1 [SD]	0.0078	0.0071			
MCT Std 1 [%CV]	0.7362	5.0508			
MCT Std 1 [%DIFF]		-6.6667			
MCT Std 2 [MEAN]	0.8010	0.4100			
MCT Std 2 [SD]	0.0156	0.0198			
MCT Std 2 [%CV]	1.9421	4.8290			
MCT Std 2 [%DIFF]		2.5000			
MCT Std 3 [MEAN]	0.5145	1.0345			
MCT Std 3 [SD]	0.0219	0.0841			
MCT Std 3 [%CV]	4.2605	8.1339			
MCT Std 3 [%DIFF]		3.4500			
MCT Std 4 [MEAN]	0.3935	1.7680			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0021	0.0212			
MCT Std 4 [%CV]	0.5391	1.1998			
MCT Std 4 [%DIFF]		-11.6000			
MCT Std 5 [MEAN]	0.2680				
MCT Std 5 [SD]	0.0071				
MCT Std 5 [%CV]	2.6385				
MCT 546 LRB 1 [MEAN]	1.1655	0.0315			
MCT 546 LRB 1 [SD]	0.0007	0.0007			
MCT 546 LRB 1 [%CV]	0.0607	2.2448			
MCT 546 Low-CV [MEAN]	0.8190	0.3870			
MCT 546 Low-CV [SD]	0.0212	0.0269			
MCT 546 Low-CV [%CV]	2.5901	6.9432			
MCT 546 LFB 1 [MEAN]	0.7060	0.5510			
MCT 546 LFB 1 [SD]	0.0014	0.0028			
MCT 546 LFB 1 [%CV]	0.2003	0.5133			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.1841
B = 1.3723
C = 0.54330
D = 0.23690
R2 coef = 0.99872
50% = 0.795

