



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46135	Pokagon SP - Main Beach	8/11/2025	8/13/2025	< 0.30
AC46136	Pokagon SP - Potawatomi Inn Beach	8/11/2025	8/13/2025	< 0.30
AC46137	Chain O'Lakes SP - Sand Lake Beach	8/11/2025	8/13/2025	< 0.30
AC46138	Ouabache SP - Kunkel Lake Beach	8/11/2025	8/13/2025	< 0.30
AC46139	Potato Creek SP - Worster Lake Beach	8/12/2025	8/13/2025	< 0.30
AC46140	Mississinewa Lake - Miami SRA Beach	8/12/2025	8/13/2025	28
AC46141	Salamonie Lake - Lost Bridge West SRA Beach	8/12/2025	8/13/2025	0.74
AC46142	Summit Lake SP - Summit Lake Beach	8/12/2025	8/13/2025	< 0.30
AC46143	Mississinewa Lake - Miami SRA Beach (Field Duplicate)	8/12/2025	8/13/2025	33
AC46144	Field Blank	8/12/2025	8/13/2025	< 0.30
AC46145	Ferdinand State Forest - Ferdinand Lake Beach	8/11/2025	8/13/2025	< 0.30
AC46146	Patoka Lake - Newton Stewart SRA	8/11/2025	8/13/2025	< 0.30

Test Report (by Request)

Test Information

Request: 8/13/2025 3:44:16 PM
Date: 8/13/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.411 Abs	0.012 µg/L	R^2=0.99789, 99.2%		0.000	Kit:25085(
MCT Std 0	MICROCYSTINS ADDA 54	1.431 Abs [1.4210] {1.0 C	0.000 µg/L [0.006]	R^2=0.99789, 100.7%		0.000	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.174 Abs	0.200 µg/L	R^2=0.99789, 82.6%		0.150	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.306 Abs [1.2400] {7.5 C	0.091 µg/L [0.146]	R^2=0.99789, 91.9%		0.150	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	0.977 Abs	0.419 µg/L	R^2=0.99789, 68.7%		0.400	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	1.002 Abs [0.9895] {1.8 C	0.386 µg/L [0.403]	R^2=0.99789, 70.5%		0.400	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.719 Abs	0.954 µg/L	R^2=0.99789, 50.5%		1.000	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.646 Abs [0.6825] {7.6 C	1.230 µg/L [1.092]	R^2=0.99789, 45.4%		1.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.568 Abs	1.672 µg/L	R^2=0.99789, 39.9%		2.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.551 Abs [0.5595] {2.1 C	1.800 µg/L [1.736]	R^2=0.99789, 38.7%		2.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.386 Abs	> 5.000 µg/L	27.164 %Abs		5.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.367 Abs [0.3765] {3.6 C	> 5.000 µg/L	25.827 %Abs		5.000	Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.417 Abs	0.007 µg/L	99.719 %Abs			Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.344 Abs [1.3805] {3.7 C	0.063 µg/L [0.035]	94.581 %Abs [97.1			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.033 Abs	0.347 µg/L	72.695 %Abs			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.976 Abs [1.0045] {4.0 C	0.420 µg/L [0.384]	68.684 %Abs [70.6			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.911 Abs	0.518 µg/L	64.110 %Abs			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.909 Abs [0.9100] {0.2 C	0.521 µg/L [0.520]	63.969 %Abs [64.0			Kit:25085(

Note

Signature *David Jordan*

David Jordan 8/13/2025

Test Information

Request: 8/13/2025 3:45:52 PM
Date: 8/13/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC46135	MICROCYSTINS ADDA 54	1.327 Abs	0.075 µg/L	Low, 93.385 %Abs		0.300 - 5.000	Kit:25085(
AC46135	MICROCYSTINS ADDA 54	1.306 Abs [1.3165] {1.1 C	0.091 µg/L [0.083]	Low, 91.907 %Abs		0.300 - 5.000	Kit:25085(
AC46136	MICROCYSTINS ADDA 54	1.253 Abs	0.133 µg/L	Low, 88.177 %Abs		0.300 - 5.000	Kit:25085(
AC46136	MICROCYSTINS ADDA 54	1.154 Abs [1.2035] {5.8 C	0.219 µg/L [0.176]	Low, 81.210 %Abs		0.300 - 5.000	Kit:25085(
AC46137	MICROCYSTINS ADDA 54	1.338 Abs	0.067 µg/L	Low, 94.159 %Abs		0.300 - 5.000	Kit:25085(
AC46137	MICROCYSTINS ADDA 54	1.211 Abs [1.2745] {7.0 C	0.168 µg/L [0.118]	Low, 85.222 %Abs		0.300 - 5.000	Kit:25085(
AC46138	MICROCYSTINS ADDA 54	1.206 Abs	0.172 µg/L	Low, 84.870 %Abs		0.300 - 5.000	Kit:25085(
AC46138	MICROCYSTINS ADDA 54	1.210 Abs [1.2080] {0.2 C	0.169 µg/L [0.171]	Low, 85.151 %Abs		0.300 - 5.000	Kit:25085(
AC46139	MICROCYSTINS ADDA 54	1.208 Abs	0.170 µg/L	Low, 85.011 %Abs		0.300 - 5.000	Kit:25085(
AC46139	MICROCYSTINS ADDA 54	1.194 Abs [1.2010] {0.8 C	0.182 µg/L [0.176]	Low, 84.025 %Abs		0.300 - 5.000	Kit:25085(
AC46139MS	MICROCYSTINS ADDA 54	0.745 Abs	0.876 µg/L	52.428 %Abs		0.300 - 5.000	Kit:25085(
AC46139MS	MICROCYSTINS ADDA 54	0.701 Abs [0.7230] {4.3 C	1.014 µg/L [0.945]	49.331 %Abs [50.8		0.300 - 5.000	Kit:25085(
AC46139MSD	MICROCYSTINS ADDA 54	0.750 Abs	0.861 µg/L	52.780 %Abs		0.300 - 5.000	Kit:25085(
AC46139MSD	MICROCYSTINS ADDA 54	0.682 Abs [0.7160] {6.7 C	1.082 µg/L [0.972]	47.994 %Abs [50.3		0.300 - 5.000	Kit:25085(
AC46140 10X	MICROCYSTINS ADDA 54	0.511 Abs	21.760 µg/L	High, 35.961 %Abs	MDF=10.000	0.300 - 5.000	Kit:25085(
AC46140 10X	MICROCYSTINS ADDA 54	0.438 Abs [0.4745] {10.9	33.540 µg/L [27.65	High, 30.823 %Abs	MDF=10.000	0.300 - 5.000	Kit:25085(
AC46141	MICROCYSTINS ADDA 54	0.881 Abs	0.569 µg/L	61.999 %Abs		0.300 - 5.000	Kit:25085(
AC46141	MICROCYSTINS ADDA 54	0.733 Abs [0.8070] {13.0	0.911 µg/L [0.740]	51.583 %Abs [56.7		0.300 - 5.000	Kit:25085(
AC46142	MICROCYSTINS ADDA 54	1.345 Abs	0.062 µg/L	Low, 94.652 %Abs		0.300 - 5.000	Kit:25085(
AC46142	MICROCYSTINS ADDA 54	1.303 Abs [1.3240] {2.2 C	0.094 µg/L [0.078]	Low, 91.696 %Abs		0.300 - 5.000	Kit:25085(
AC46143 10X	MICROCYSTINS ADDA 54	0.442 Abs	32.610 µg/L	High, 31.105 %Abs	MDF=10.000	0.300 - 5.000	Kit:25085(
AC46143 10X	MICROCYSTINS ADDA 54	0.373 Abs [0.4075] {12.0	> 5.000 [32.610]	High, Out Adjust Dil	MDF=10.000	0.300 - 5.000	Kit:25085(
AC46144	MICROCYSTINS ADDA 54	1.470 Abs	0.000 µg/L	Low, 103.448 %Abs		0.300 - 5.000	Kit:25085(
AC46144	MICROCYSTINS ADDA 54	1.362 Abs [1.4160] {5.4 C	0.049 µg/L [0.025]	Low, 95.848 %Abs		0.300 - 5.000	Kit:25085(
AC46145	MICROCYSTINS ADDA 54	1.249 Abs	0.136 µg/L	Low, 87.896 %Abs		0.300 - 5.000	Kit:25085(
AC46145	MICROCYSTINS ADDA 54	1.206 Abs [1.2275] {2.5 C	0.172 µg/L [0.154]	Low, 84.870 %Abs		0.300 - 5.000	Kit:25085(
AC46146	MICROCYSTINS ADDA 54	1.328 Abs	0.075 µg/L	Low, 93.455 %Abs		0.300 - 5.000	Kit:25085(
AC46146	MICROCYSTINS ADDA 54	1.351 Abs [1.3395] {1.2 C	0.058 µg/L [0.067]	Low, 95.074 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.805 Abs	0.722 µg/L	56.650 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.698 Abs [0.7515] {10.1	1.024 µg/L [0.873]	49.120 %Abs [52.8		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.443 Abs	0.000 µg/L	Low, 101.548 %Abs		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.372 Abs [1.4075] {3.6 C	0.042 µg/L [0.021]	Low, 96.552 %Abs		0.300 - 5.000	Kit:25085(

Note

Signature

David Jordan

David Jordan 8/13/2025

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	
8/13/2025 3:44:16 PM					
MCT Std 0	1.411 Abs	0.012 µg/L	R ² =0.99789, 99.296 %Abs	RK1:23->A01@2	
MCT Std 0	1.431 Abs [1.4210] {1.0 CV}	0.000 µg/L [0.006] {141.4 CV}	R ² =0.99789, 100.704 %Abs	RK1:23->B01@2	
MCT Std 1	1.174 Abs	0.200 µg/L	R ² =0.99789, 82.618 %Abs	RK1:24->C01@2	
MCT Std 1	1.306 Abs [1.2400] {7.5 CV}	0.091 µg/L [0.146] {53.0 CV}	R ² =0.99789, 91.907 %Abs	RK1:24->D01@2	
MCT Std 2	0.977 Abs	0.419 µg/L	R ² =0.99789, 68.754 %Abs	RK1:25->E01@2	
MCT Std 2	1.002 Abs [0.9895] {1.8 CV}	0.386 µg/L [0.403] {5.8 CV}	R ² =0.99789, 70.514 %Abs	RK1:25->F01@3	
MCT Std 3	0.719 Abs	0.954 µg/L	R ² =0.99789, 50.598 %Abs	RK1:26->G01@3	
MCT Std 3	0.646 Abs [0.6825] {7.6 CV}	1.230 µg/L [1.092] {17.9 CV}	R ² =0.99789, 45.461 %Abs	RK1:26->H01@3	
MCT Std 4	0.568 Abs	1.672 µg/L	R ² =0.99789, 39.972 %Abs	RK1:27->A02@2	
MCT Std 4	0.551 Abs [0.5595] {2.1 CV}	1.800 µg/L [1.736] {5.2 CV}	R ² =0.99789, 38.776 %Abs	RK1:27->B02@2	
MCT Std 5	0.386 Abs	> 5.000 µg/L	27.164 %Abs	RK1:28->C02@2	
MCT Std 5	0.367 Abs [0.3765] {3.6 CV}	> 5.000 µg/L	25.827 %Abs	RK1:28->D02@2	

8/13/2025 3:44:16 PM					
MCT 546 LRB 1	1.417 Abs	0.007 µg/L	99.719 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.344 Abs [1.3805] {3.7 CV}	0.063 µg/L [0.035] {113.1 CV}	94.581 %Abs [97.150 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	1.033 Abs	0.347 µg/L	72.695 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.976 Abs [1.0045] {4.0 CV}	0.420 µg/L [0.384] {13.5 CV}	68.684 %Abs [70.690 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.911 Abs	0.518 µg/L	64.110 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.909 Abs [0.9100] {0.2 CV}	0.521 µg/L [0.520] {0.4 CV}	63.969 %Abs [64.039 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.4210	0.0060			
MCT Std 0 [SD]	0.0141	0.0085			
MCT Std 0 [%CV]	0.9952	141.4214			
MCT Std 1 [MEAN]	1.2400	0.1455			
MCT Std 1 [SD]	0.0933	0.0771			
MCT Std 1 [%CV]	7.5273	52.9723			
MCT Std 1 [%DIFF]		-3.0000			
MCT Std 2 [MEAN]	0.9895	0.4025			
MCT Std 2 [SD]	0.0177	0.0233			
MCT Std 2 [%CV]	1.7865	5.7974			
MCT Std 2 [%DIFF]		0.6250			
MCT Std 3 [MEAN]	0.6825	1.0920			
MCT Std 3 [SD]	0.0516	0.1952			
MCT Std 3 [%CV]	7.5632	17.8719			
MCT Std 3 [%DIFF]		9.2000			
MCT Std 4 [MEAN]	0.5595	1.7360			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0120	0.0905			
MCT Std 4 [%CV]	2.1485	5.2137			
MCT Std 4 [%DIFF]		-13.2000			
MCT Std 5 [MEAN]	0.3765				
MCT Std 5 [SD]	0.0134				
MCT Std 5 [%CV]	3.5684				
MCT 546 LRB 1 [MEAN]	1.3805	0.0350			
MCT 546 LRB 1 [SD]	0.0516	0.0396			
MCT 546 LRB 1 [%CV]	3.7391	113.1371			
MCT 546 Low-CV [MEAN]	1.0045	0.3835			
MCT 546 Low-CV [SD]	0.0403	0.0516			
MCT 546 Low-CV [%CV]	4.0125	13.4599			
MCT 546 LFB 1 [MEAN]	0.9100	0.5195			
MCT 546 LFB 1 [SD]	0.0014	0.0021			
MCT 546 LFB 1 [%CV]	0.1554	0.4083			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.4245
B = 1.1302
C = 0.60831
D = 0.29470
R2 coef = 0.99789
50% = 0.982

