



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45929	Chain O'Lakes SP - Sand Lake Beach	7/28/2025	7/30/2025	< 0.30
AC45930	Potato Creek SP - Worster Lake Beach	7/28/2025	7/30/2025	< 0.30
AC45931	Mississinewa Lake - Miami SRA Beach	7/28/2025	7/30/2025	8.85*
AC45932	Salamonie Lake - Lost Bridge West SRA Beach	7/28/2025	7/30/2025	1.23
AC45933	Potato Creek SP - Worster Lake Beach (Field Dup)	7/28/2025	7/30/2025	< 0.30
AC45934	Field Blank	7/28/2025	7/30/2025	< 0.30
AC45935	Ferdinand State Forest - Ferdinand Lake Beach	7/29/2025	7/30/2025	< 0.30

*The result for AC45931 was calculated by taking the average value of the original sample and lab duplicate.

Test Report (by Request)

Test Information

Request: 7/30/2025 2:59:39 PM
Date: 7/30/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.495 Abs	0.000 µg/L	R^2=0.99694, 109.5		0.000	Kit:25085(
MCT Std 0	MICROCYSTINS ADDA 54	1.234 Abs [1.3645] {13.5	0.191 µg/L [0.096]	R^2=0.99694, 90.40		0.000	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.293 Abs	0.129 µg/L	R^2=0.99694, 94.72		0.150	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.301 Abs [1.2970] {0.4 C	0.120 µg/L [0.125]	R^2=0.99694, 95.31		0.150	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	1.021 Abs	0.416 µg/L	R^2=0.99694, 74.79		0.400	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	1.028 Abs [1.0245] {0.5 C	0.408 µg/L [0.412]	R^2=0.99694, 75.31		0.400	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.662 Abs	1.060 µg/L	R^2=0.99694, 48.49		1.000	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.669 Abs [0.6655] {0.7 C	1.040 µg/L [1.050]	R^2=0.99694, 49.01		1.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.539 Abs	1.574 µg/L	R^2=0.99694, 39.48		2.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.495 Abs [0.5170] {6.0 C	1.880 µg/L [1.727]	R^2=0.99694, 36.26		2.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.340 Abs	> 5.000 µg/L	24.908 %Abs		5.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.343 Abs [0.3415] {0.6 C	> 5.000 µg/L	25.128 %Abs		5.000	Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.439 Abs	0.000 µg/L	105.421 %Abs			Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.435 Abs [1.4370] {0.2 C	0.000 µg/L [0.000]	105.128 %Abs [105			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.975 Abs	0.472 µg/L	71.429 %Abs			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	1.011 Abs [0.9930] {2.6 C	0.428 µg/L [0.450]	74.066 %Abs [72.7			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.952 Abs	0.501 µg/L	69.744 %Abs			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.881 Abs [0.9165] {5.5 C	0.601 µg/L [0.551]	64.542 %Abs [67.1			Kit:25085(

Note

Signature 
David Jordan 7/30/2025

Test Information								
Request: 7/30/2025 3:00:37 PM								
Date: 7/30/2025								
Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#	
AC45929	MICROCYSTINS ADDA 54	1.372 Abs	0.022 µg/L	Low, 100.513 %Abs		0.300 - 5.000	Kit:25085(	
AC45929	MICROCYSTINS ADDA 54	1.392 Abs [1.3820] {1.0 C	0.000 µg/L [0.011]	Low, 101.978 %Abs		0.300 - 5.000	Kit:25085(	
AC45930	MICROCYSTINS ADDA 54	1.216 Abs	0.209 µg/L	Low, 89.084 %Abs		0.300 - 5.000	Kit:25085(	
AC45930	MICROCYSTINS ADDA 54	1.218 Abs [1.2170] {0.1 C	0.207 µg/L [0.208]	Low, 89.231 %Abs		0.300 - 5.000	Kit:25085(	
AC45931 5X	MICROCYSTINS ADDA 54	0.691 Abs	4.890 µg/L	50.623 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(	
AC45931 5X	MICROCYSTINS ADDA 54	0.665 Abs [0.6780] {2.7 C	5.255 µg/L [5.073]	High, 48.718 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(	
AC45931LD 5X	MICROCYSTINS ADDA 54	0.432 Abs	13.050 µg/L	High, 31.648 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(	
AC45931LD 5X	MICROCYSTINS ADDA 54	0.443 Abs [0.4375] {1.8 C	12.210 µg/L [12.63	High, 32.454 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(	
AC45932	MICROCYSTINS ADDA 54	0.628 Abs	1.171 µg/L	46.007 %Abs		0.300 - 5.000	Kit:25085(	
AC45932	MICROCYSTINS ADDA 54	0.597 Abs [0.6125] {3.6 C	1.289 µg/L [1.230]	43.736 %Abs [44.8		0.300 - 5.000	Kit:25085(	
AC45933	MICROCYSTINS ADDA 54	1.159 Abs	0.267 µg/L	Low, 84.908 %Abs		0.300 - 5.000	Kit:25085(	
AC45933	MICROCYSTINS ADDA 54	1.189 Abs [1.1740] {1.8 C	0.236 µg/L [0.252]	Low, 87.106 %Abs		0.300 - 5.000	Kit:25085(	
AC45934	MICROCYSTINS ADDA 54	1.569 Abs	0.000 µg/L	Low, 114.945 %Abs		0.300 - 5.000	Kit:25085(	
AC45934	MICROCYSTINS ADDA 54	1.508 Abs [1.5385] {2.8 C	0.000 µg/L [0.000]	Low, 110.476 %Abs		0.300 - 5.000	Kit:25085(	
AC45935	MICROCYSTINS ADDA 54	1.269 Abs	0.155 µg/L	Low, 92.967 %Abs		0.300 - 5.000	Kit:25085(	
AC45935	MICROCYSTINS ADDA 54	1.247 Abs [1.2580] {1.2 C	0.178 µg/L [0.167]	Low, 91.355 %Abs		0.300 - 5.000	Kit:25085(	
LFB 2	MICROCYSTINS ADDA 54	0.903 Abs	0.569 µg/L	66.154 %Abs		0.300 - 5.000	Kit:25085(	
LFB 2	MICROCYSTINS ADDA 54	0.871 Abs [0.8870] {2.6 C	0.616 µg/L [0.593]	63.810 %Abs [64.9		0.300 - 5.000	Kit:25085(	
LRB 2	MICROCYSTINS ADDA 54	1.336 Abs	0.079 µg/L	Low, 97.875 %Abs		0.300 - 5.000	Kit:25085(	
LRB 2	MICROCYSTINS ADDA 54	1.401 Abs [1.3685] {3.4 C	0.000 µg/L [0.040]	Low, 102.637 %Abs		0.300 - 5.000	Kit:25085(	

Note

Signature

David Jordan

David Jordan 7/30/2025

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	
7/30/2025 2:59:39 PM					
MCT Std 0	1.495 Abs	0.000 µg/L	R ² =0.99694, 109.524 %Abs	RK1:23->A01@2	
MCT Std 0	1.234 Abs [1.3645] {13.5 CV}	0.191 µg/L [0.096] {141.4 CV}	R ² =0.99694, 90.403 %Abs	RK1:23->B01@2	
MCT Std 1	1.293 Abs	0.129 µg/L	R ² =0.99694, 94.725 %Abs	RK1:24->C01@2	
MCT Std 1	1.301 Abs [1.2970] {0.4 CV}	0.120 µg/L [0.125] {5.1 CV}	R ² =0.99694, 95.311 %Abs	RK1:24->D01@2	
MCT Std 2	1.021 Abs	0.416 µg/L	R ² =0.99694, 74.799 %Abs	RK1:25->E01@2	
MCT Std 2	1.028 Abs [1.0245] {0.5 CV}	0.408 µg/L [0.412] {1.4 CV}	R ² =0.99694, 75.311 %Abs	RK1:25->F01@3	
MCT Std 3	0.662 Abs	1.060 µg/L	R ² =0.99694, 48.498 %Abs	RK1:26->G01@3	
MCT Std 3	0.669 Abs [0.6655] {0.7 CV}	1.040 µg/L [1.050] {1.3 CV}	R ² =0.99694, 49.011 %Abs	RK1:26->H01@3	
MCT Std 4	0.539 Abs	1.574 µg/L	R ² =0.99694, 39.487 %Abs	RK1:27->A02@2	
MCT Std 4	0.495 Abs [0.5170] {6.0 CV}	1.880 µg/L [1.727] {12.5 CV}	R ² =0.99694, 36.264 %Abs	RK1:27->B02@2	
MCT Std 5	0.340 Abs	> 5.000 µg/L	24.908 %Abs	RK1:28->C02@2	
MCT Std 5	0.343 Abs [0.3415] {0.6 CV}	> 5.000 µg/L	25.128 %Abs	RK1:28->D02@2	

7/30/2025 2:59:39 PM					
MCT 546 LRB 1	1.439 Abs	0.000 µg/L	105.421 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.435 Abs [1.4370] {0.2 CV}	0.000 µg/L [0.000]	105.128 %Abs [105.275 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.975 Abs	0.472 µg/L	71.429 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	1.011 Abs [0.9930] {2.6 CV}	0.428 µg/L [0.450] {6.9 CV}	74.066 %Abs [72.747 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.952 Abs	0.501 µg/L	69.744 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.881 Abs [0.9165] {5.5 CV}	0.601 µg/L [0.551] {12.8 CV}	64.542 %Abs [67.143 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.3645	0.0955			
MCT Std 0 [SD]	0.1846	0.1351			
MCT Std 0 [%CV]	13.5255	141.4214			
MCT Std 1 [MEAN]	1.2970	0.1245			
MCT Std 1 [SD]	0.0057	0.0064			
MCT Std 1 [%CV]	0.4362	5.1116			
MCT Std 1 [%DIFF]		-17.0000			
MCT Std 2 [MEAN]	1.0245	0.4120			
MCT Std 2 [SD]	0.0049	0.0057			
MCT Std 2 [%CV]	0.4831	1.3730			
MCT Std 2 [%DIFF]		3.0000			
MCT Std 3 [MEAN]	0.6655	1.0500			
MCT Std 3 [SD]	0.0049	0.0141			
MCT Std 3 [%CV]	0.7438	1.3469			
MCT Std 3 [%DIFF]		5.0000			
MCT Std 4 [MEAN]	0.5170	1.7270			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0311	0.2164			
MCT Std 4 [%CV]	6.0179	12.5289			
MCT Std 4 [%DIFF]		-13.6500			
MCT Std 5 [MEAN]	0.3415				
MCT Std 5 [SD]	0.0021				
MCT Std 5 [%CV]	0.6212				
MCT 546 LRB 1 [MEAN]	1.4370	0.0000			
MCT 546 LRB 1 [SD]	0.0028	0.0000			
MCT 546 LRB 1 [%CV]	0.1968	0.0000			
MCT 546 Low-CV [MEAN]	0.9930	0.4500			
MCT 546 Low-CV [SD]	0.0255	0.0311			
MCT 546 Low-CV [%CV]	2.5635	6.9139			
MCT 546 LFB 1 [MEAN]	0.9165	0.5510			
MCT 546 LFB 1 [SD]	0.0502	0.0707			
MCT 546 LFB 1 [%CV]	5.4779	12.8332			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.3784
B = 1.4989
C = 0.65718
D = 0.31226
R2 coef = 0.99694
50% = 1.001

