



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46387	Chain O'Lakes SP - Sand Lake Beach	8/25/2025	8/28/2025	< 0.30
AC46388	Ouabache SP - Kunkel Lake Beach	8/25/2025	8/28/2025	< 0.30
AC46389	Summit Lake SP - Summit Lake Beach	8/25/2025	8/28/2025	< 0.30
AC46390	Potato Creek SP - Worster Lake Beach	8/26/2025	8/28/2025	< 0.30
AC46391	Mississinewa Lake - Miami SRA Beach	8/26/2025	8/28/2025	13
AC46392	Salamonie Lake - Lost Bridge West SRA Beach	8/26/2025	8/28/2025	< 0.30
AC46393	Potato Creek SP - Worster Lake Beach (Field Duplicate)	8/26/2025	8/28/2025	0.34
AC46394	Field Blank	8/26/2025	8/28/2025	< 0.30
AC46395	Ferdinand State Forest - Ferdinand Lake Beach	8/25/2025	8/28/2025	< 0.30
AC46396	Patoka Lake - Newton Stewart SRA	8/25/2025	8/28/2025	< 0.30
AC46418	Ft Ben Harrison SP - Dog Lake	8/25/2025	8/28/2025	< 0.30

Test Report (by Request)

Test Information

Request: 8/28/2025 12:00:12 PM
Date: 8/28/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.453 Abs	0.000 µg/L	R^2=0.99807, 103.8		0.000	Kit:25085(
MCT Std 0	MICROCYSTINS ADDA 54	1.344 Abs [1.3985] {5.5 C	0.067 µg/L [0.034]	R^2=0.99807, 96.06		0.000	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.262 Abs	0.138 µg/L	R^2=0.99807, 90.20		0.150	Kit:25085(
MCT Std 1	MICROCYSTINS ADDA 54	1.274 Abs [1.2680] {0.7 C	0.128 µg/L [0.133]	R^2=0.99807, 91.06		0.150	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	0.991 Abs	0.415 µg/L	R^2=0.99807, 70.83		0.400	Kit:25085(
MCT Std 2	MICROCYSTINS ADDA 54	0.983 Abs [0.9870] {0.6 C	0.425 µg/L [0.420]	R^2=0.99807, 70.26		0.400	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.678 Abs	1.060 µg/L	R^2=0.99807, 48.46		1.000	Kit:25085(
MCT Std 3	MICROCYSTINS ADDA 54	0.697 Abs [0.6875] {2.0 C	0.996 µg/L [1.028]	R^2=0.99807, 49.82		1.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.574 Abs	1.545 µg/L	R^2=0.99807, 41.02		2.000	Kit:25085(
MCT Std 4	MICROCYSTINS ADDA 54	0.509 Abs [0.5415] {8.5 C	2.073 µg/L [1.809]	R^2=0.99807, 36.38		2.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.383 Abs	> 5.000 µg/L	27.377 %Abs		5.000	Kit:25085(
MCT Std 5	MICROCYSTINS ADDA 54	0.371 Abs [0.3770] {2.3 C	> 5.000 µg/L	26.519 %Abs		5.000	Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.376 Abs	0.038 µg/L	98.356 %Abs			Kit:25085(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.340 Abs [1.3580] {1.9 C	0.071 µg/L [0.055]	95.783 %Abs [97.0			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.927 Abs	0.502 µg/L	66.262 %Abs			Kit:25085(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.913 Abs [0.9200] {1.1 C	0.523 µg/L [0.513]	65.261 %Abs [65.7			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.922 Abs	0.510 µg/L	65.904 %Abs			Kit:25085(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.909 Abs [0.9155] {1.0 C	0.529 µg/L [0.520]	64.975 %Abs [65.4			Kit:25085(

Note

Signature

David Jordan

David Jordan 8/28/2025

Test Report (by Request)

Test Information

Request: 8/28/2025 12:01:31 PM
Date: 8/28/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC46387	MICROCYSTINS ADDA 54	1.361 Abs	0.052 µg/L	Low, 97.284 %Abs		0.300 - 5.000	Kit:25085(
AC46387	MICROCYSTINS ADDA 54	1.236 Abs [1.2985] {6.8 C	0.161 µg/L [0.107]	Low, 88.349 %Abs		0.300 - 5.000	Kit:25085(
AC46388	MICROCYSTINS ADDA 54	1.275 Abs	0.127 µg/L	Low, 91.137 %Abs		0.300 - 5.000	Kit:25085(
AC46388	MICROCYSTINS ADDA 54	1.267 Abs [1.2710] {0.4 C	0.134 µg/L [0.131]	Low, 90.565 %Abs		0.300 - 5.000	Kit:25085(
AC46389	MICROCYSTINS ADDA 54	1.320 Abs	0.088 µg/L	Low, 94.353 %Abs		0.300 - 5.000	Kit:25085(
AC46389	MICROCYSTINS ADDA 54	1.396 Abs [1.3580] {4.0 C	0.016 µg/L [0.052]	Low, 99.786 %Abs		0.300 - 5.000	Kit:25085(
AC46389MS	MICROCYSTINS ADDA 54	0.847 Abs	0.634 µg/L	60.543 %Abs		0.300 - 5.000	Kit:25085(
AC46389MS	MICROCYSTINS ADDA 54	0.769 Abs [0.8080] {6.8 C	0.797 µg/L [0.716]	54.968 %Abs [57.7		0.300 - 5.000	Kit:25085(
AC46389MSD	MICROCYSTINS ADDA 54	0.876 Abs	0.583 µg/L	62.616 %Abs		0.300 - 5.000	Kit:25085(
AC46389MSD	MICROCYSTINS ADDA 54	0.825 Abs [0.8505] {4.2 C	0.676 µg/L [0.630]	58.971 %Abs [60.7		0.300 - 5.000	Kit:25085(
AC46390	MICROCYSTINS ADDA 54	1.164 Abs	0.227 µg/L	Low, 83.202 %Abs		0.300 - 5.000	Kit:25085(
AC46390	MICROCYSTINS ADDA 54	1.157 Abs [1.1605] {0.4 C	0.233 µg/L [0.230]	Low, 82.702 %Abs		0.300 - 5.000	Kit:25085(
AC46391 5X	MICROCYSTINS ADDA 54	0.475 Abs	12.495 µg/L	High, 33.953 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(
AC46391 5X	MICROCYSTINS ADDA 54	0.469 Abs [0.4720] {0.9 C	12.960 µg/L [12.72	High, 33.524 %Abs	MDF=5.000	0.300 - 5.000	Kit:25085(
AC46392	MICROCYSTINS ADDA 54	1.116 Abs	0.273 µg/L	Low, 79.771 %Abs		0.300 - 5.000	Kit:25085(
AC46392	MICROCYSTINS ADDA 54	1.164 Abs [1.1400] {3.0 C	0.227 µg/L [0.250]	Low, 83.202 %Abs		0.300 - 5.000	Kit:25085(
AC46393	MICROCYSTINS ADDA 54	1.068 Abs	0.324 µg/L	76.340 %Abs		0.300 - 5.000	Kit:25085(
AC46393	MICROCYSTINS ADDA 54	1.037 Abs [1.0525] {2.1 C	0.359 µg/L [0.342]	74.124 %Abs [75.2		0.300 - 5.000	Kit:25085(
AC46394	MICROCYSTINS ADDA 54	1.382 Abs	0.032 µg/L	Low, 98.785 %Abs		0.300 - 5.000	Kit:25085(
AC46394	MICROCYSTINS ADDA 54	1.350 Abs [1.3660] {1.7 C	0.062 µg/L [0.047]	Low, 96.497 %Abs		0.300 - 5.000	Kit:25085(
AC46395	MICROCYSTINS ADDA 54	1.124 Abs	0.265 µg/L	Low, 80.343 %Abs		0.300 - 5.000	Kit:25085(
AC46395	MICROCYSTINS ADDA 54	1.072 Abs [1.0980] {3.3 C	0.319 µg/L [0.292]	76.626 %Abs [Low,		0.300 - 5.000	Kit:25085(
AC46396	MICROCYSTINS ADDA 54	1.261 Abs	0.139 µg/L	Low, 90.136 %Abs		0.300 - 5.000	Kit:25085(
AC46396	MICROCYSTINS ADDA 54	1.235 Abs [1.2480] {1.5 C	0.162 µg/L [0.151]	Low, 88.277 %Abs		0.300 - 5.000	Kit:25085(
AC46418	MICROCYSTINS ADDA 54	1.299 Abs	0.106 µg/L	Low, 92.852 %Abs		0.300 - 5.000	Kit:25085(
AC46418	MICROCYSTINS ADDA 54	1.259 Abs [1.2790] {2.2 C	0.141 µg/L [0.124]	Low, 89.993 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.844 Abs	0.640 µg/L	60.329 %Abs		0.300 - 5.000	Kit:25085(
LFB 2	MICROCYSTINS ADDA 54	0.954 Abs [0.8990] {8.7 C	0.464 µg/L [0.552]	68.192 %Abs [64.2		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.474 Abs	0.000 µg/L	Low, 105.361 %Abs		0.300 - 5.000	Kit:25085(
LRB 2	MICROCYSTINS ADDA 54	1.426 Abs [1.4500] {2.3 C	0.000 µg/L [0.000]	Low, 101.930 %Abs		0.300 - 5.000	Kit:25085(

Note

Signature

David Jordan

David Jordan 8/28/2025

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:2508506858

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
8/28/2025 12:00:12 PM					
MCT Std 0	1.453 Abs	0.000 µg/L	R ² =0.99807, 103.860 %Abs	RK1:23->A01@2	
MCT Std 0	1.344 Abs [1.3985] {5.5 CV}	0.067 µg/L [0.034] {141.4 CV}	R ² =0.99807, 96.069 %Abs	RK1:23->B01@2	
MCT Std 1	1.262 Abs	0.138 µg/L	R ² =0.99807, 90.207 %Abs	RK1:24->C01@2	
MCT Std 1	1.274 Abs [1.2680] {0.7 CV}	0.128 µg/L [0.133] {5.3 CV}	R ² =0.99807, 91.065 %Abs	RK1:24->D01@2	
MCT Std 2	0.991 Abs	0.415 µg/L	R ² =0.99807, 70.836 %Abs	RK1:25->E01@2	
MCT Std 2	0.983 Abs [0.9870] {0.6 CV}	0.425 µg/L [0.420] {1.7 CV}	R ² =0.99807, 70.264 %Abs	RK1:25->F01@3	
MCT Std 3	0.678 Abs	1.060 µg/L	R ² =0.99807, 48.463 %Abs	RK1:26->G01@3	
MCT Std 3	0.697 Abs [0.6875] {2.0 CV}	0.996 µg/L [1.028] {4.4 CV}	R ² =0.99807, 49.821 %Abs	RK1:26->H01@3	
MCT Std 4	0.574 Abs	1.545 µg/L	R ² =0.99807, 41.029 %Abs	RK1:27->A02@2	
MCT Std 4	0.509 Abs [0.5415] {8.5 CV}	2.073 µg/L [1.809] {20.6 CV}	R ² =0.99807, 36.383 %Abs	RK1:27->B02@2	
MCT Std 5	0.383 Abs	> 5.000 µg/L	27.377 %Abs	RK1:28->C02@2	
MCT Std 5	0.371 Abs [0.3770] {2.3 CV}	> 5.000 µg/L	26.519 %Abs	RK1:28->D02@2	

8/28/2025 12:00:12 PM					
MCT 546 LRB 1	1.376 Abs	0.038 µg/L	98.356 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.340 Abs [1.3580] {1.9 CV}	0.071 µg/L [0.055] {42.8 CV}	95.783 %Abs [97.069 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.927 Abs	0.502 µg/L	66.262 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.913 Abs [0.9200] {1.1 CV}	0.523 µg/L [0.513] {2.9 CV}	65.261 %Abs [65.761 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.922 Abs	0.510 µg/L	65.904 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.909 Abs [0.9155] {1.0 CV}	0.529 µg/L [0.520] {2.6 CV}	64.975 %Abs [65.440 %Abs]	RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.3985	0.0335			
MCT Std 0 [SD]	0.0771	0.0474			
MCT Std 0 [%CV]	5.5112	141.4214			
MCT Std 1 [MEAN]	1.2680	0.1330			
MCT Std 1 [SD]	0.0085	0.0071			
MCT Std 1 [%CV]	0.6692	5.3166			
MCT Std 1 [%DIFF]		-11.3333			
MCT Std 2 [MEAN]	0.9870	0.4200			
MCT Std 2 [SD]	0.0057	0.0071			
MCT Std 2 [%CV]	0.5731	1.6836			
MCT Std 2 [%DIFF]		5.0000			
MCT Std 3 [MEAN]	0.6875	1.0280			
MCT Std 3 [SD]	0.0134	0.0453			
MCT Std 3 [%CV]	1.9542	4.4022			
MCT Std 3 [%DIFF]		2.8000			
MCT Std 4 [MEAN]	0.5415	1.8090			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0460	0.3734			
MCT Std 4 [%CV]	8.4879	20.6386			
MCT Std 4 [%DIFF]		-9.5500			
MCT Std 5 [MEAN]	0.3770				
MCT Std 5 [SD]	0.0085				
MCT Std 5 [%CV]	2.2507				
MCT 546 LRB 1 [MEAN]	1.3580	0.0545			
MCT 546 LRB 1 [SD]	0.0255	0.0233			
MCT 546 LRB 1 [%CV]	1.8745	42.8156			
MCT 546 Low-CV [MEAN]	0.9200	0.5125			
MCT 546 Low-CV [SD]	0.0099	0.0148			
MCT 546 Low-CV [%CV]	1.0760	2.8974			
MCT 546 LFB 1 [MEAN]	0.9155	0.5195			
MCT 546 LFB 1 [SD]	0.0092	0.0134			
MCT 546 LFB 1 [%CV]	1.0041	2.5861			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.4069
B = 1.2699
C = 0.60270
D = 0.32192
R2 coef = 0.99807
50% = 0.988

