



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45898	Tippecanoe River at Monterey Boat Ramp	7/15/2025	7/16/2025	< 0.30
AC45899	Tippecanoe River at Pulaski Boat Ramp	7/15/2025	7/16/2025	< 0.30
AC45900	Tippecanoe River at the SR 16/SR 39 bridge (Buffalo)	7/15/2025	7/16/2025	< 0.30

Test Report (by Request)

Test Information

Request: 7/16/2025 3:17:45 PM
Date: 7/16/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.494 Abs	0.000 µg/L	R^2=0.99674, 101.3		0.000	Kit:250850
MCT Std 0	MICROCYSTINS ADDA 54	1.453 Abs [1.4735] {2.0 C	0.027 µg/L [0.014]	R^2=0.99674, 98.57		0.000	Kit:250850
MCT Std 1	MICROCYSTINS ADDA 54	1.315 Abs	0.127 µg/L	R^2=0.99674, 89.21		0.150	Kit:250850
MCT Std 1	MICROCYSTINS ADDA 54	1.242 Abs [1.2785] {4.0 C	0.177 µg/L [0.152]	R^2=0.99674, 84.26		0.150	Kit:250850
MCT Std 2	MICROCYSTINS ADDA 54	0.975 Abs	0.400 µg/L	R^2=0.99674, 66.14		0.400	Kit:250850
MCT Std 2	MICROCYSTINS ADDA 54	0.997 Abs [0.9860] {1.6 C	0.377 µg/L [0.389]	R^2=0.99674, 67.63		0.400	Kit:250850
MCT Std 3	MICROCYSTINS ADDA 54	0.650 Abs	0.962 µg/L	R^2=0.99674, 44.09		1.000	Kit:250850
MCT Std 3	MICROCYSTINS ADDA 54	0.559 Abs [0.6045] {10.6	1.323 µg/L [1.143]	R^2=0.99674, 37.92		1.000	Kit:250850
MCT Std 4	MICROCYSTINS ADDA 54	0.517 Abs	1.581 µg/L	R^2=0.99674, 35.07		2.000	Kit:250850
MCT Std 4	MICROCYSTINS ADDA 54	0.508 Abs [0.5125] {1.2 C	1.649 µg/L [1.615]	R^2=0.99674, 34.46		2.000	Kit:250850
MCT Std 5	MICROCYSTINS ADDA 54	0.352 Abs	> 5.000 µg/L	23.881 %Abs		5.000	Kit:250850
MCT Std 5	MICROCYSTINS ADDA 54	0.354 Abs [0.3530] {0.4 C	> 5.000 µg/L	24.016 %Abs		5.000	Kit:250850
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.394 Abs	0.072 µg/L	94.573 %Abs			Kit:250850
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.417 Abs [1.4055] {1.2 C	0.056 µg/L [0.064]	96.133 %Abs [95.3			Kit:250850
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.969 Abs	0.406 µg/L	65.739 %Abs			Kit:250850
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.894 Abs [0.9315] {5.7 C	0.492 µg/L [0.449]	60.651 %Abs [63.1			Kit:250850
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.892 Abs	0.495 µg/L	60.516 %Abs			Kit:250850
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.872 Abs [0.8820] {1.6 C	0.521 µg/L [0.508]	59.159 %Abs [59.8			Kit:250850

Note

Signature *David Jordan*

David Jordan 7/16/2025

Test Report (by Request)

Test Information

Request: 7/16/2025 3:19:21 PM
Date: 7/16/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC45898	MICROCYSTINS ADDA 54	1.195 Abs	0.210 µg/L	Low, 81.072 %Abs		0.300 - 5.000	Kit:250850
AC45898	MICROCYSTINS ADDA 54	1.185 Abs [1.1900] {0.6 C	0.218 µg/L [0.214]	Low, 80.393 %Abs		0.300 - 5.000	Kit:250850
AC45899	MICROCYSTINS ADDA 54	1.380 Abs	0.082 µg/L	Low, 93.623 %Abs		0.300 - 5.000	Kit:250850
AC45899	MICROCYSTINS ADDA 54	1.380 Abs [1.3800] {0.0 C	0.082 µg/L [0.082]	Low, 93.623 %Abs		0.300 - 5.000	Kit:250850
AC45900	MICROCYSTINS ADDA 54	1.377 Abs	0.084 µg/L	Low, 93.419 %Abs		0.300 - 5.000	Kit:250850
AC45900	MICROCYSTINS ADDA 54	1.368 Abs [1.3725] {0.5 C	0.091 µg/L [0.088]	Low, 92.809 %Abs		0.300 - 5.000	Kit:250850
AC45900LD	MICROCYSTINS ADDA 54	1.339 Abs	0.110 µg/L	Low, 90.841 %Abs		0.300 - 5.000	Kit:250850
AC45900LD	MICROCYSTINS ADDA 54	1.384 Abs [1.3615] {2.3 C	0.080 µg/L [0.095]	Low, 93.894 %Abs		0.300 - 5.000	Kit:250850
LFB 2	MICROCYSTINS ADDA 54	0.816 Abs	0.602 µg/L	55.360 %Abs		0.300 - 5.000	Kit:250850
LFB 2	MICROCYSTINS ADDA 54	0.709 Abs [0.7625] {9.9 C	0.806 µg/L [0.704]	48.100 %Abs [51.7		0.300 - 5.000	Kit:250850
LRB 2	MICROCYSTINS ADDA 54	1.396 Abs	0.071 µg/L	Low, 94.708 %Abs		0.300 - 5.000	Kit:250850
LRB 2	MICROCYSTINS ADDA 54	1.344 Abs [1.3700] {2.7 C	0.107 µg/L [0.089]	Low, 91.180 %Abs		0.300 - 5.000	Kit:250850

Note

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests

* Generated by software version (6.4.1.1171/1085/1.00/0.95) 7/16/2025 3:53:05 PM

Signature *David Jordan*

David Jordan 7/16/2025

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
7/16/2025 3:17:45 PM				
MCT Std 0	1.494 Abs	0.000 µg/L	R ² =0.99674, 101.357 %Abs	RK1:23->A01@2
MCT Std 0	1.453 Abs [1.4735] {2.0 CV}	0.027 µg/L [0.014] {141.4 CV}	R ² =0.99674, 98.575 %Abs	RK1:23->B01@2
MCT Std 1	1.315 Abs	0.127 µg/L	R ² =0.99674, 89.213 %Abs	RK1:24->C01@2
MCT Std 1	1.242 Abs [1.2785] {4.0 CV}	0.177 µg/L [0.152] {23.3 CV}	R ² =0.99674, 84.261 %Abs	RK1:24->D01@2
MCT Std 2	0.975 Abs	0.400 µg/L	R ² =0.99674, 66.147 %Abs	RK1:25->E01@2
MCT Std 2	0.997 Abs [0.9860] {1.6 CV}	0.377 µg/L [0.389] {4.2 CV}	R ² =0.99674, 67.639 %Abs	RK1:25->F01@3
MCT Std 3	0.650 Abs	0.962 µg/L	R ² =0.99674, 44.098 %Abs	RK1:26->G01@3
MCT Std 3	0.559 Abs [0.6045] {10.6 CV}	1.323 µg/L [1.143] {22.3 CV}	R ² =0.99674, 37.924 %Abs	RK1:26->H01@3
MCT Std 4	0.517 Abs	1.581 µg/L	R ² =0.99674, 35.075 %Abs	RK1:27->A02@2
MCT Std 4	0.508 Abs [0.5125] {1.2 CV}	1.649 µg/L [1.615] {3.0 CV}	R ² =0.99674, 34.464 %Abs	RK1:27->B02@2
MCT Std 5	0.352 Abs	> 5.000 µg/L	23.881 %Abs	RK1:28->C02@2
MCT Std 5	0.354 Abs [0.3530] {0.4 CV}	> 5.000 µg/L	24.016 %Abs	RK1:28->D02@2

7/16/2025 3:17:45 PM				
MCT 546 LRB 1	1.394 Abs	0.072 µg/L	94.573 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.417 Abs [1.4055] {1.2 CV}	0.056 µg/L [0.064] {17.7 CV}	96.133 %Abs [95.353 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	0.969 Abs	0.406 µg/L	65.739 %Abs	RK1:30->G02@3
MCT 546 Low-CV	0.894 Abs [0.9315] {5.7 CV}	0.492 µg/L [0.449] {13.5 CV}	60.651 %Abs [63.195 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.892 Abs	0.495 µg/L	60.516 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.872 Abs [0.8820] {1.6 CV}	0.521 µg/L [0.508] {3.6 CV}	59.159 %Abs [59.837 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.4735	0.0135		
MCT Std 0 [SD]	0.0290	0.0191		
MCT Std 0 [%CV]	1.9675	141.4214		
MCT Std 1 [MEAN]	1.2785	0.1520		
MCT Std 1 [SD]	0.0516	0.0354		
MCT Std 1 [%CV]	4.0375	23.2601		
MCT Std 1 [%DIFF]		1.3333		
MCT Std 2 [MEAN]	0.9860	0.3885		
MCT Std 2 [SD]	0.0156	0.0163		
MCT Std 2 [%CV]	1.5777	4.1862		
MCT Std 2 [%DIFF]		-2.8750		
MCT Std 3 [MEAN]	0.6045	1.1425		
MCT Std 3 [SD]	0.0643	0.2553		
MCT Std 3 [%CV]	10.6446	22.3427		
MCT Std 3 [%DIFF]		14.2500		
MCT Std 4 [MEAN]	0.5125	1.6150		

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0064	0.0481		
MCT Std 4 [%CV]	1.2417	2.9773		
MCT Std 4 [%DIFF]		-19.2500		
MCT Std 5 [MEAN]	0.3530			
MCT Std 5 [SD]	0.0014			
MCT Std 5 [%CV]	0.4006			
MCT 546 LRB 1 [MEAN]	1.4055	0.0640		
MCT 546 LRB 1 [SD]	0.0163	0.0113		
MCT 546 LRB 1 [%CV]	1.1571	17.6777		
MCT 546 Low-CV [MEAN]	0.9315	0.4490		
MCT 546 Low-CV [SD]	0.0530	0.0608		
MCT 546 Low-CV [%CV]	5.6933	13.5437		
MCT 546 LFB 1 [MEAN]	0.8820	0.5080		
MCT 546 LFB 1 [SD]	0.0141	0.0184		
MCT 546 LFB 1 [%CV]	1.6034	3.6191		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4747
 B = 1.3589
 C = 0.48516
 D = 0.32468
 R2 coef = 0.99674
 50% = 0.744

