



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45383	Cecil M. Harden Lake - Raccoon Lake SRA Beach	6/9/2025	6/11/2025	< 0.30
AC45384	Cagles Mill Lake - Lieber SRA Beach	6/9/2025	6/11/2025	< 0.30
AC45385	Monroe Lake - Fairfax SRA Beach	6/9/2025	6/11/2025	< 0.30
AC45386	Monroe Lake - Paynetown SRA Beach	6/9/2025	6/11/2025	< 0.30
AC45387	Starve Hollow SRA - Starve Hollow Lake Beach	6/9/2025	6/11/2025	< 0.30
AC45388	Whitewater Memorial SP - Whitewater Lake Beach	6/10/2025	6/11/2025	0.35
AC45389	Brookville Lake - Quakertown SRA Beach	6/10/2025	6/11/2025	< 0.30
AC45390	Brookville Lake - Mounds SRA Beach	6/10/2025	6/11/2025	< 0.30
AC45391	Hardy Lake SRA - Hardy Lake SRA Beach	6/10/2025	6/11/2025	< 0.30
AC45392	Deam Lake SRA - Deam Lake Beach	6/10/2025	6/11/2025	< 0.30
AC45393	Cagles Mill Lake - Lieber SRA Beach (Field Duplicate)	6/9/2025	6/11/2025	< 0.30
AC45394	Field Blank	6/9/2025	6/11/2025	< 0.30
AC45395	Ft. Ben Harrison SP Dog Lake	6/9/2025	6/11/2025	< 0.30

Test Report (by Request)

Test Information

Request: 6/11/2025 3:42:22 PM
Date: 6/11/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.149 Abs	0.029 µg/L	R^2=0.99820, 98.54		0.000	Kit:240440
MCT Std 0	MICROCYSTINS ADDA 54	1.183 Abs [1.1660] {2.1 C	0.000 µg/L [0.015]	R^2=0.99820, 101.4		0.000	Kit:240440
MCT Std 1	MICROCYSTINS ADDA 54	1.032 Abs	0.132 µg/L	R^2=0.99820, 88.50		0.150	Kit:240440
MCT Std 1	MICROCYSTINS ADDA 54	1.024 Abs [1.0280] {0.6 C	0.138 µg/L [0.135]	R^2=0.99820, 87.82		0.150	Kit:240440
MCT Std 2	MICROCYSTINS ADDA 54	0.774 Abs	0.398 µg/L	R^2=0.99820, 66.38		0.400	Kit:240440
MCT Std 2	MICROCYSTINS ADDA 54	0.738 Abs [0.7560] {3.4 C	0.448 µg/L [0.423]	R^2=0.99820, 63.25		0.400	Kit:240440
MCT Std 3	MICROCYSTINS ADDA 54	0.492 Abs	1.027 µg/L	R^2=0.99820, 42.15		1.000	Kit:240440
MCT Std 3	MICROCYSTINS ADDA 54	0.502 Abs [0.4970] {1.4 C	0.989 µg/L [1.008]	R^2=0.99820, 43.05		1.000	Kit:240440
MCT Std 4	MICROCYSTINS ADDA 54	0.365 Abs	1.831 µg/L	R^2=0.99820, 31.30		2.000	Kit:240440
MCT Std 4	MICROCYSTINS ADDA 54	0.377 Abs [0.3710] {2.3 C	1.714 µg/L [1.773]	R^2=0.99820, 32.33		2.000	Kit:240440
MCT Std 5	MICROCYSTINS ADDA 54	0.247 Abs	> 5.000 µg/L	21.184 %Abs		5.000	Kit:240440
MCT Std 5	MICROCYSTINS ADDA 54	0.229 Abs [0.2380] {5.3 C	> 5.000 µg/L	19.640 %Abs		5.000	Kit:240440
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.156 Abs	0.022 µg/L	99.142 %Abs			Kit:240440
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.147 Abs [1.1515] {0.6 C	0.031 µg/L [0.027]	98.370 %Abs [98.7			Kit:240440
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.797 Abs	0.369 µg/L	68.353 %Abs			Kit:240440
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.748 Abs [0.7725] {4.5 C	0.434 µg/L [0.402]	64.151 %Abs [66.2			Kit:240440
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.661 Abs	0.575 µg/L	56.690 %Abs			Kit:240440
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.671 Abs [0.6660] {1.1 C	0.557 µg/L [0.566]	57.547 %Abs [57.1			Kit:240440

Note

Signature *David Jordan*

David Jordan 6/11/2025

* 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) 6/11/2025 3:49:18 PM

Test Report (by Request)

Test Information

Request: 6/11/2025 3:43:38 PM
Date: 6/11/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC45383	MICROCYSTINS ADDA 54	1.075 Abs	0.095 µg/L	Low, 92.196 %Abs		0.300 - 5.000	Kit:24044C
AC45383	MICROCYSTINS ADDA 54	1.044 Abs [1.0595] {2.1 C	0.121 µg/L [0.108]	Low, 89.537 %Abs		0.300 - 5.000	Kit:24044C
AC45384	MICROCYSTINS ADDA 54	1.035 Abs	0.129 µg/L	Low, 88.765 %Abs		0.300 - 5.000	Kit:24044C
AC45384	MICROCYSTINS ADDA 54	1.006 Abs [1.0205] {2.0 C	0.154 µg/L [0.142]	Low, 86.278 %Abs		0.300 - 5.000	Kit:24044C
AC45385	MICROCYSTINS ADDA 54	1.114 Abs	0.062 µg/L	Low, 95.540 %Abs		0.300 - 5.000	Kit:24044C
AC45385	MICROCYSTINS ADDA 54	1.079 Abs [1.0965] {2.3 C	0.092 µg/L [0.077]	Low, 92.539 %Abs		0.300 - 5.000	Kit:24044C
AC45386	MICROCYSTINS ADDA 54	1.149 Abs	0.029 µg/L	Low, 98.542 %Abs		0.300 - 5.000	Kit:24044C
AC45386	MICROCYSTINS ADDA 54	1.169 Abs [1.1590] {1.2 C	0.007 µg/L [0.018]	Low, 100.257 %Abs		0.300 - 5.000	Kit:24044C
AC45387	MICROCYSTINS ADDA 54	1.161 Abs	0.017 µg/L	Low, 99.571 %Abs		0.300 - 5.000	Kit:24044C
AC45387	MICROCYSTINS ADDA 54	1.135 Abs [1.1480] {1.6 C	0.043 µg/L [0.030]	Low, 97.341 %Abs		0.300 - 5.000	Kit:24044C
AC45388	MICROCYSTINS ADDA 54	0.813 Abs	0.349 µg/L	69.726 %Abs		0.300 - 5.000	Kit:24044C
AC45388	MICROCYSTINS ADDA 54	0.809 Abs [0.8110] {0.3 C	0.354 µg/L [0.352]	69.383 %Abs [69.5		0.300 - 5.000	Kit:24044C
AC45389	MICROCYSTINS ADDA 54	1.018 Abs	0.144 µg/L	Low, 87.307 %Abs		0.300 - 5.000	Kit:24044C
AC45389	MICROCYSTINS ADDA 54	0.974 Abs [0.9960] {3.1 C	0.183 µg/L [0.164]	Low, 83.533 %Abs		0.300 - 5.000	Kit:24044C
AC45390	MICROCYSTINS ADDA 54	1.087 Abs	0.085 µg/L	Low, 93.225 %Abs		0.300 - 5.000	Kit:24044C
AC45390	MICROCYSTINS ADDA 54	1.087 Abs [1.0870] {0.0 C	0.085 µg/L [0.085]	Low, 93.225 %Abs		0.300 - 5.000	Kit:24044C
AC45390MS	MICROCYSTINS ADDA 54	0.629 Abs	0.638 µg/L	53.945 %Abs		0.300 - 5.000	Kit:24044C
AC45390MS	MICROCYSTINS ADDA 54	0.613 Abs [0.6210] {1.8 C	0.672 µg/L [0.655]	52.573 %Abs [53.2		0.300 - 5.000	Kit:24044C
AC45390MSD	MICROCYSTINS ADDA 54	0.618 Abs	0.661 µg/L	53.002 %Abs		0.300 - 5.000	Kit:24044C
AC45390MSD	MICROCYSTINS ADDA 54	0.608 Abs [0.6130] {1.2 C	0.683 µg/L [0.672]	52.144 %Abs [52.5		0.300 - 5.000	Kit:24044C
AC45391	MICROCYSTINS ADDA 54	1.031 Abs	0.132 µg/L	Low, 88.422 %Abs		0.300 - 5.000	Kit:24044C
AC45391	MICROCYSTINS ADDA 54	0.989 Abs [1.0100] {2.9 C	0.169 µg/L [0.151]	Low, 84.820 %Abs		0.300 - 5.000	Kit:24044C
AC45392	MICROCYSTINS ADDA 54	1.097 Abs	0.076 µg/L	Low, 94.082 %Abs		0.300 - 5.000	Kit:24044C
AC45392	MICROCYSTINS ADDA 54	1.125 Abs [1.1110] {1.8 C	0.052 µg/L [0.064]	Low, 96.484 %Abs		0.300 - 5.000	Kit:24044C
AC45393	MICROCYSTINS ADDA 54	1.029 Abs	0.134 µg/L	Low, 88.250 %Abs		0.300 - 5.000	Kit:24044C
AC45393	MICROCYSTINS ADDA 54	1.056 Abs [1.0425] {1.8 C	0.111 µg/L [0.123]	Low, 90.566 %Abs		0.300 - 5.000	Kit:24044C
AC45394	MICROCYSTINS ADDA 54	1.153 Abs	0.025 µg/L	Low, 98.885 %Abs		0.300 - 5.000	Kit:24044C
AC45394	MICROCYSTINS ADDA 54	1.150 Abs [1.1515] {0.2 C	0.028 µg/L [0.027]	Low, 98.628 %Abs		0.300 - 5.000	Kit:24044C
AC45395	MICROCYSTINS ADDA 54	1.170 Abs	0.005 µg/L	Low, 100.343 %Abs		0.300 - 5.000	Kit:24044C
AC45395	MICROCYSTINS ADDA 54	1.169 Abs [1.1695] {0.1 C	0.007 µg/L [0.006]	Low, 100.257 %Abs		0.300 - 5.000	Kit:24044C
LFB 2	MICROCYSTINS ADDA 54	0.686 Abs	0.531 µg/L	58.834 %Abs		0.300 - 5.000	Kit:24044C
LFB 2	MICROCYSTINS ADDA 54	0.667 Abs [0.6765] {2.0 C	0.564 µg/L [0.548]	57.204 %Abs [58.0		0.300 - 5.000	Kit:24044C
LRB 2	MICROCYSTINS ADDA 54	1.175 Abs	0.000 µg/L	Low, 100.772 %Abs		0.300 - 5.000	Kit:24044C
LRB 2	MICROCYSTINS ADDA 54	1.119 Abs [1.1470] {3.5 C	0.057 µg/L [0.029]	Low, 95.969 %Abs		0.300 - 5.000	Kit:24044C

Note

Signature *David Jordan*

David Jordan 6/11/2025

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

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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
6/11/2025 3:42:22 PM				
MCT Std 0	1.149 Abs	0.029 µg/L	R ² =0.99820, 98.542 %Abs	RK1:23->A01@2
MCT Std 0	1.183 Abs [1.1660] {2.1 CV}	0.000 µg/L [0.015] {141.4 CV}	R ² =0.99820, 101.458 %Abs	RK1:23->B01@2
MCT Std 1	1.032 Abs	0.132 µg/L	R ² =0.99820, 88.508 %Abs	RK1:24->C01@2
MCT Std 1	1.024 Abs [1.0280] {0.6 CV}	0.138 µg/L [0.135] {3.1 CV}	R ² =0.99820, 87.822 %Abs	RK1:24->D01@2
MCT Std 2	0.774 Abs	0.398 µg/L	R ² =0.99820, 66.381 %Abs	RK1:25->E01@2
MCT Std 2	0.738 Abs [0.7560] {3.4 CV}	0.448 µg/L [0.423] {8.4 CV}	R ² =0.99820, 63.293 %Abs	RK1:25->F01@3
MCT Std 3	0.492 Abs	1.027 µg/L	R ² =0.99820, 42.196 %Abs	RK1:26->G01@3
MCT Std 3	0.502 Abs [0.4970] {1.4 CV}	0.989 µg/L [1.008] {2.7 CV}	R ² =0.99820, 43.053 %Abs	RK1:26->H01@3
MCT Std 4	0.365 Abs	1.831 µg/L	R ² =0.99820, 31.304 %Abs	RK1:27->A02@2
MCT Std 4	0.377 Abs [0.3710] {2.3 CV}	1.714 µg/L [1.773] {4.7 CV}	R ² =0.99820, 32.333 %Abs	RK1:27->B02@2
MCT Std 5	0.247 Abs	> 5.000 µg/L	21.184 %Abs	RK1:28->C02@2
MCT Std 5	0.229 Abs [0.2380] {5.3 CV}	> 5.000 µg/L	19.640 %Abs	RK1:28->D02@2

6/11/2025 3:42:22 PM				
MCT 546 LRB 1	1.156 Abs	0.022 µg/L	99.142 %Abs	RK1:29->E02@2
MCT 546 LRB 1	1.147 Abs [1.1515] {0.6 CV}	0.031 µg/L [0.027] {24.0 CV}	98.370 %Abs [98.756 %Abs]	RK1:29->F02@3
MCT 546 Low-CV	0.797 Abs	0.369 µg/L	68.353 %Abs	RK1:30->G02@3
MCT 546 Low-CV	0.748 Abs [0.7725] {4.5 CV}	0.434 µg/L [0.402] {11.4 CV}	64.151 %Abs [66.252 %Abs]	RK1:30->H02@3
MCT 546 LFB 1	0.661 Abs	0.575 µg/L	56.690 %Abs	RK1:31->A03@2
MCT 546 LFB 1	0.671 Abs [0.6660] {1.1 CV}	0.557 µg/L [0.566] {2.2 CV}	57.547 %Abs [57.118 %Abs]	RK1:31->B03@2

Statistic				
MCT Std 0 [MEAN]	1.1660	0.0145		
MCT Std 0 [SD]	0.0240	0.0205		
MCT Std 0 [%CV]	2.0619	141.4214		
MCT Std 1 [MEAN]	1.0280	0.1350		
MCT Std 1 [SD]	0.0057	0.0042		
MCT Std 1 [%CV]	0.5503	3.1427		
MCT Std 1 [%DIFF]		-10.0000		
MCT Std 2 [MEAN]	0.7560	0.4230		
MCT Std 2 [SD]	0.0255	0.0354		
MCT Std 2 [%CV]	3.3672	8.3582		
MCT Std 2 [%DIFF]		5.7500		
MCT Std 3 [MEAN]	0.4970	1.0080		
MCT Std 3 [SD]	0.0071	0.0269		
MCT Std 3 [%CV]	1.4227	2.6657		
MCT Std 3 [%DIFF]		0.8000		
MCT Std 4 [MEAN]	0.3710	1.7725		

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0085	0.0827		
MCT Std 4 [%CV]	2.2871	4.6675		
MCT Std 4 [%DIFF]		-11.3750		
MCT Std 5 [MEAN]	0.2380			
MCT Std 5 [SD]	0.0127			
MCT Std 5 [%CV]	5.3479			
MCT 546 LRB 1 [MEAN]	1.1515	0.0265		
MCT 546 LRB 1 [SD]	0.0064	0.0064		
MCT 546 LRB 1 [%CV]	0.5527	24.0149		
MCT 546 Low-CV [MEAN]	0.7725	0.4015		
MCT 546 Low-CV [SD]	0.0346	0.0460		
MCT 546 Low-CV [%CV]	4.4852	11.4476		
MCT 546 LFB 1 [MEAN]	0.6660	0.5660		
MCT 546 LFB 1 [SD]	0.0071	0.0127		
MCT 546 LFB 1 [%CV]	1.0617	2.2488		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.1725
 B = 1.2751
 C = 0.53172
 D = 0.19810
 R2 coef = 0.99820
 50% = 0.743

