



Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41095	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/22/2024	7/25/2024	< 0.30
AC41096	Cagles Mill Lake - Lieber SRA Beach	7/22/2024	7/25/2024	< 0.30
AC41097	Starve Hollow SRA - Starve Hollow Lake Beach	7/22/2024	7/25/2024	< 0.30
AC41098	Hardy Lake SRA - Hardy Lake SRA Beach	7/22/2024	7/25/2024	< 0.30
AC41099	Whitewater Memorial SP - Whitewater Lake Beach	7/23/2024	7/25/2024	< 0.30
AC41100	Brookville Lake - Quakertown SRA Beach	7/23/2024	7/25/2024	< 0.30
AC41101	Brookville Lake - Mounds SRA Beach	7/23/2024	7/25/2024	< 0.30
AC41102	Whitewater Memorial SP - Whitewater Lake Beach (Field Duplicate)	7/22/2024	7/25/2024	< 0.30
AC41103	Field Blank	7/22/2024	7/25/2024	< 0.30
AC41104	Ft. Ben Harrison SP Dog Lake	7/23/2024	7/25/2024	< 0.30

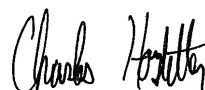
Test Information

Request: 7/25/2024 2:43:43 PM
Date: 7/25/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.180 Abs	0.028 µg/L	R^2=0.99868, 99.16%		0.000	Kit:240446
MCT Std 0	MICROCYSTINS ADDA 54	1.200 Abs [1.1900] {1.2 C	0.000 µg/L [0.014]	R^2=0.99868, 100.8%		0.000	Kit:240446
MCT Std 1	MICROCYSTINS ADDA 54	1.068 Abs	0.131 µg/L	R^2=0.99868, 89.74%		0.150	Kit:240446
MCT Std 1	MICROCYSTINS ADDA 54	1.055 Abs [1.0615] {0.9 C	0.142 µg/L [0.137]	R^2=0.99868, 88.65%		0.150	Kit:240446
MCT Std 2	MICROCYSTINS ADDA 54	0.772 Abs	0.418 µg/L	R^2=0.99868, 64.87%		0.400	Kit:240446
MCT Std 2	MICROCYSTINS ADDA 54	0.767 Abs [0.7695] {0.5 C	0.424 µg/L [0.421]	R^2=0.99868, 64.45%		0.400	Kit:240446
MCT Std 3	MICROCYSTINS ADDA 54	0.501 Abs	0.959 µg/L	R^2=0.99868, 42.10%		1.000	Kit:240446
MCT Std 3	MICROCYSTINS ADDA 54	0.482 Abs [0.4915] {2.7 C	1.027 µg/L [0.993]	R^2=0.99868, 40.50%		1.000	Kit:240446
MCT Std 4	MICROCYSTINS ADDA 54	0.356 Abs	1.818 µg/L	R^2=0.99868, 29.91%		2.000	Kit:240446
MCT Std 4	MICROCYSTINS ADDA 54	0.356 Abs [0.3560] {0.0 C	1.818 µg/L [1.818]	R^2=0.99868, 29.91%		2.000	Kit:240446
MCT Std 5	MICROCYSTINS ADDA 54	0.241 Abs	> 5.000 µg/L	20.252 %Abs		5.000	Kit:240446
MCT Std 5	MICROCYSTINS ADDA 54	0.240 Abs [0.2405] {0.3 C	> 5.000 µg/L	20.168 %Abs		5.000	Kit:240446
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.152 Abs	0.057 µg/L	96.807 %Abs			Kit:240446
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.179 Abs [1.1655] {1.6 C	0.029 µg/L [0.043]	99.076 %Abs [97.9			Kit:240446
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.860 Abs	0.319 µg/L	72.269 %Abs			Kit:240446
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.826 Abs [0.8430] {2.9 C	0.355 µg/L [0.337]	69.412 %Abs [70.8			Kit:240446
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.627 Abs	0.640 µg/L	52.689 %Abs			Kit:240446
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.562 Abs [0.5945] {7.7 C	0.782 µg/L [0.711]	47.227 %Abs [49.9			Kit:240446

Note

Signature



Test Information

Request: 7/25/2024 3:07:40 PM
Date: 7/25/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC41095	MICROCYSTINS ADDA 54	0.938 Abs	0.243 µg/L	Low, 78.824 %Abs		0.300 - 5.000	Kit:24044(
AC41095	MICROCYSTINS ADDA 54	0.885 Abs [0.9115] {4.1 C	0.293 µg/L [0.268]	Low, 74.370 %Abs		0.300 - 5.000	Kit:24044(
AC41096	MICROCYSTINS ADDA 54	1.025 Abs	0.167 µg/L	Low, 86.134 %Abs		0.300 - 5.000	Kit:24044(
AC41096	MICROCYSTINS ADDA 54	1.056 Abs [1.0405] {2.1 C	0.141 µg/L [0.154]	Low, 88.739 %Abs		0.300 - 5.000	Kit:24044(
AC41097	MICROCYSTINS ADDA 54	1.010 Abs	0.180 µg/L	Low, 84.874 %Abs		0.300 - 5.000	Kit:24044(
AC41097	MICROCYSTINS ADDA 54	0.965 Abs [0.9875] {3.2 C	0.219 µg/L [0.200]	Low, 81.092 %Abs		0.300 - 5.000	Kit:24044(
AC41097MS	MICROCYSTINS ADDA 54	0.693 Abs	0.527 µg/L	58.235 %Abs		0.300 - 5.000	Kit:24044(
AC41097MS	MICROCYSTINS ADDA 54	0.699 Abs [0.6960] {0.6 C	0.518 µg/L [0.523]	58.739 %Abs [58.4		0.300 - 5.000	Kit:24044(
AC41097MSD	MICROCYSTINS ADDA 54	0.679 Abs	0.549 µg/L	57.059 %Abs		0.300 - 5.000	Kit:24044(
AC41097MSD	MICROCYSTINS ADDA 54	0.686 Abs [0.6825] {0.7 C	0.538 µg/L [0.544]	57.647 %Abs [57.3		0.300 - 5.000	Kit:24044(
AC41098	MICROCYSTINS ADDA 54	0.987 Abs	0.199 µg/L	Low, 82.941 %Abs		0.300 - 5.000	Kit:24044(
AC41098	MICROCYSTINS ADDA 54	0.968 Abs [0.9775] {1.4 C	0.216 µg/L [0.208]	Low, 81.345 %Abs		0.300 - 5.000	Kit:24044(
AC41099	MICROCYSTINS ADDA 54	0.988 Abs	0.199 µg/L	Low, 83.025 %Abs		0.300 - 5.000	Kit:24044(
AC41099	MICROCYSTINS ADDA 54	1.103 Abs [1.0455] {7.8 C	0.101 µg/L [0.150]	Low, 92.689 %Abs		0.300 - 5.000	Kit:24044(
AC41100	MICROCYSTINS ADDA 54	1.114 Abs	0.092 µg/L	Low, 93.613 %Abs		0.300 - 5.000	Kit:24044(
AC41100	MICROCYSTINS ADDA 54	1.131 Abs [1.1225] {1.1 C	0.077 µg/L [0.085]	Low, 95.042 %Abs		0.300 - 5.000	Kit:24044(
AC41101	MICROCYSTINS ADDA 54	1.136 Abs	0.072 µg/L	Low, 95.462 %Abs		0.300 - 5.000	Kit:24044(
AC41101	MICROCYSTINS ADDA 54	1.142 Abs [1.1390] {0.4 C	0.067 µg/L [0.070]	Low, 95.966 %Abs		0.300 - 5.000	Kit:24044(
AC41102	MICROCYSTINS ADDA 54	1.082 Abs	0.119 µg/L	Low, 90.924 %Abs		0.300 - 5.000	Kit:24044(
AC41102	MICROCYSTINS ADDA 54	1.110 Abs [1.0960] {1.8 C	0.095 µg/L [0.107]	Low, 93.277 %Abs		0.300 - 5.000	Kit:24044(
AC41103	MICROCYSTINS ADDA 54	1.127 Abs	0.080 µg/L	Low, 94.706 %Abs		0.300 - 5.000	Kit:24044(
AC41103	MICROCYSTINS ADDA 54	1.162 Abs [1.1445] {2.2 C	0.048 µg/L [0.064]	Low, 97.647 %Abs		0.300 - 5.000	Kit:24044(
AC41104	MICROCYSTINS ADDA 54	1.196 Abs	0.003 µg/L	Low, 100.504 %Abs		0.300 - 5.000	Kit:24044(
AC41104	MICROCYSTINS ADDA 54	1.195 Abs [1.1955] {0.1 C	0.006 µg/L [0.005]	Low, 100.420 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.711 Abs	0.500 µg/L	59.748 %Abs		0.300 - 5.000	Kit:24044(
LFB 2	MICROCYSTINS ADDA 54	0.691 Abs [0.7010] {2.0 C	0.530 µg/L [0.515]	58.067 %Abs [58.9		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.203 Abs	0.000 µg/L	Low, 101.092 %Abs		0.300 - 5.000	Kit:24044(
LRB 2	MICROCYSTINS ADDA 54	1.059 Abs [1.1310] {9.0 C	0.138 µg/L [0.069]	Low, 88.992 %Abs		0.300 - 5.000	Kit:24044(

Note

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	
7/25/2024 2:43:43 PM					
MCT Std 0	1.180 Abs	0.028 µg/L	R^2=0.99868, 99.160 %Abs	RK1:23->A01@2	
MCT Std 0	1.200 Abs [1.1900] {1.2 CV}	0.000 µg/L [0.014] {141.4 CV}	R^2=0.99868, 100.840 %Abs	RK1:23->B01@2	
MCT Std 1	1.068 Abs	0.131 µg/L	R^2=0.99868, 89.748 %Abs	RK1:24->C01@2	
MCT Std 1	1.055 Abs [1.0615] {0.9 CV}	0.142 µg/L [0.137] {5.7 CV}	R^2=0.99868, 88.655 %Abs	RK1:24->D01@2	
MCT Std 2	0.772 Abs	0.418 µg/L	R^2=0.99868, 64.874 %Abs	RK1:25->E01@2	
MCT Std 2	0.767 Abs [0.7695] {0.5 CV}	0.424 µg/L [0.421] {1.0 CV}	R^2=0.99868, 64.454 %Abs	RK1:25->F01@3	
MCT Std 3	0.501 Abs	0.959 µg/L	R^2=0.99868, 42.101 %Abs	RK1:26->G01@3	
MCT Std 3	0.482 Abs [0.4915] {2.7 CV}	1.027 µg/L [0.993] {4.8 CV}	R^2=0.99868, 40.504 %Abs	RK1:26->H01@3	
MCT Std 4	0.356 Abs	1.818 µg/L	R^2=0.99868, 29.916 %Abs	RK1:27->A02@2	
MCT Std 4	0.356 Abs [0.3560] {0.0 CV}	1.818 µg/L [1.818] {0.0 CV}	R^2=0.99868, 29.916 %Abs	RK1:27->B02@2	
MCT Std 5	0.241 Abs	> 5.000 µg/L	20.252 %Abs	RK1:28->C02@2	
MCT Std 5	0.240 Abs [0.2405] {0.3 CV}	> 5.000 µg/L	20.168 %Abs	RK1:28->D02@2	
*****	*****	*****	*****	*****	*****
7/25/2024 2:43:43 PM					
MCT 546 LRB 1	1.152 Abs	0.057 µg/L	96.807 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.179 Abs [1.1655] {1.6 CV}	0.029 µg/L [0.043] {46.0 CV}	99.076 %Abs [97.941 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.860 Abs	0.319 µg/L	72.269 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.826 Abs [0.8430] {2.9 CV}	0.355 µg/L [0.337] {7.6 CV}	69.412 %Abs [70.840 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.627 Abs	0.640 µg/L	52.689 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.562 Abs [0.5945] {7.7 CV}	0.782 µg/L [0.711] {14.1 CV}	47.227 %Abs [49.958 %Abs]	RK1:31->B03@2	
*****	*****	*****	*****	*****	*****
Statistic					
MCT Std 0 [MEAN]	1.1900	0.0140			
MCT Std 0 [SD]	0.0141	0.0198			
MCT Std 0 [%CV]	1.1884	141.4214			
MCT Std 1 [MEAN]	1.0615	0.1365			
MCT Std 1 [SD]	0.0092	0.0078			
MCT Std 1 [%CV]	0.8660	5.6983			
MCT Std 1 [%DIFF]		-9.0000			
MCT Std 2 [MEAN]	0.7695	0.4210			
MCT Std 2 [SD]	0.0035	0.0042			
MCT Std 2 [%CV]	0.4595	1.0078			
MCT Std 2 [%DIFF]		5.2500			
MCT Std 3 [MEAN]	0.4915	0.9930			
MCT Std 3 [SD]	0.0134	0.0481			
MCT Std 3 [%CV]	2.7335	4.8422			
MCT Std 3 [%DIFF]		-0.7000			
MCT Std 4 [MEAN]	0.3560	1.8180			

Name	Absorbance	Concentration	Interpretation	Position	
MCT Std 4 [SD]	0.0000	0.0000			
MCT Std 4 [%CV]	0.0000	0.0000			
MCT Std 4 [%DIFF]		-9.1000			
MCT Std 5 [MEAN]	0.2405				
MCT Std 5 [SD]	0.0007				
MCT Std 5 [%CV]	0.2940				
MCT 546 LRB 1 [MEAN]	1.1655	0.0430			
MCT 546 LRB 1 [SD]	0.0191	0.0198			
MCT 546 LRB 1 [%CV]	1.6381	46.0442			
MCT 546 Low-CV [MEAN]	0.8430	0.3370			
MCT 546 Low-CV [SD]	0.0240	0.0255			
MCT 546 Low-CV [%CV]	2.8519	7.5537			
MCT 546 LFB 1 [MEAN]	0.5945	0.7110			
MCT 546 LFB 1 [SD]	0.0460	0.1004			
MCT 546 LFB 1 [%CV]	7.7312	14.1222			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.1969
B = 1.3922
C = 0.50873
D = 0.21323
R2 coef = 0.99868
50% = 0.706

