



## Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB49895	Raccoon Lake SRA	5/16/2022	5/18/2022	< 0.30
AB49897	Cagles Mill Lake Beach	5/16/2022	5/18/2022	< 0.30
AB49898	Paynetown SRA	5/16/2022	5/18/2022	< 0.30
AB49899	Fairfax SRA	5/16/2022	5/18/2022	< 0.30
AB49900	Starve Hollow SRA	5/16/2022	5/18/2022	< 0.30
AB49901	Whitewater Memorial SP	5/17/2022	5/18/2022	< 0.30
AB49902	Quakertown SRA	5/17/2022	5/18/2022	< 0.30
AB49903	Mounds SRA	5/17/2022	5/18/2022	< 0.30
AB49904	Hardy Lake SRA	5/17/2022	5/18/2022	< 0.30
AB49896	Deam Lake SRA	5/17/2022	5/18/2022	< 0.30
AB49905	Field Blank	5/16/2022	5/18/2022	< 0.30
AB49906	Raccoon Lake SRA (Field Duplicate)	5/16/2022	5/18/2022	< 0.30
AB51245	Ft. Ben Harrison SP Dog Lake	5/16/2022	5/18/2022	< 0.30

## Test Information

Request: 5/18/2022 4:41:16 PM  
Date: 5/18/2022 - 5/19/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
MCT Std 0	MICROCYSTINS ADDA 54	1.355 Abs	0.010 µg/L	R^2=0.99345, 98.18			M22B127(
MCT Std 0	MICROCYSTINS ADDA 54	1.405 Abs [1.3800] {2.6 C	0.000 µg/L [0.005]	R^2=0.99345, 101.8			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.035 Abs	0.158 µg/L	R^2=0.99345, 75.00			M22B127(
MCT Std 1	MICROCYSTINS ADDA 54	1.049 Abs [1.0420] {1.0 C	0.150 µg/L [0.154]	R^2=0.99345, 76.01			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.785 Abs	0.370 µg/L	R^2=0.99345, 56.88			M22B127(
MCT Std 2	MICROCYSTINS ADDA 54	0.781 Abs [0.7830] {0.4 C	0.375 µg/L [0.373]	R^2=0.99345, 56.55			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.500 Abs	1.061 µg/L	R^2=0.99345, 36.23			M22B127(
MCT Std 3	MICROCYSTINS ADDA 54	0.428 Abs [0.4640] {11.0	1.552 µg/L [1.306]	R^2=0.99345, 31.01			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.458 Abs	1.309 µg/L	R^2=0.99345, 33.18			M22B127(
MCT Std 4	MICROCYSTINS ADDA 54	0.422 Abs [0.4400] {5.8 C	1.610 µg/L [1.460]	R^2=0.99345, 30.58			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.296 Abs	> 5.000 µg/L	21.449 %Abs			M22B127(
MCT Std 5	MICROCYSTINS ADDA 54	0.278 Abs [0.2870] {4.4 C	> 5.000 µg/L	20.145 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.354 Abs	0.011 µg/L	98.116 %Abs			M22B127(
MCT 546 LRB 1	MICROCYSTINS ADDA 54	1.327 Abs [1.3405] {1.4 C	0.021 µg/L [0.016]	96.159 %Abs [97.1			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.832 Abs	0.318 µg/L	60.290 %Abs			M22B127(
MCT 546 Low-CV	MICROCYSTINS ADDA 54	0.771 Abs [0.8015] {5.4 C	0.387 µg/L [0.352]	55.870 %Abs [58.0			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.803 Abs	0.349 µg/L	58.188 %Abs			M22B127(
MCT 546 LFB 1	MICROCYSTINS ADDA 54	0.785 Abs [0.7940] {1.6 C	0.370 µg/L [0.359]	56.884 %Abs [57.5			M22B127(

## Note

Signature

*David Jordan*

David Jordan 5/18/2022

# Test Report (by Request)

## Test Information

Request: 5/18/2022 4:42:21 PM  
Date: 5/18/2022 - 5/19/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB49895	MICROCYSTINS ADDA 54	1.184 Abs	0.080 µg/L	Low, 85.797 %Abs		0.300 - 5.000	M22B127(
AB49895	MICROCYSTINS ADDA 54	1.256 Abs [1.2200] {4.2 C	0.049 µg/L [0.064]			0.300 - 5.000	M22B127(
AB49897	MICROCYSTINS ADDA 54	1.321 Abs	0.023 µg/L	Low, 95.725 %Abs		0.300 - 5.000	M22B127(
AB49897	MICROCYSTINS ADDA 54	1.212 Abs [1.2665] {6.1 C	0.068 µg/L [0.046]			0.300 - 5.000	M22B127(
AB49898	MICROCYSTINS ADDA 54	1.252 Abs	0.051 µg/L	Low, 90.725 %Abs		0.300 - 5.000	M22B127(
AB49898	MICROCYSTINS ADDA 54	1.241 Abs [1.2465] {0.6 C	0.055 µg/L [0.053]			0.300 - 5.000	M22B127(
AB49899	MICROCYSTINS ADDA 54	1.419 Abs	0.000 µg/L	Low, 102.826 %Abs		0.300 - 5.000	M22B127(
AB49899	MICROCYSTINS ADDA 54	1.393 Abs [1.4060] {1.3 C	0.000 µg/L [0.000]			0.300 - 5.000	M22B127(
AB49900	MICROCYSTINS ADDA 54	1.347 Abs	0.013 µg/L	Low, 97.609 %Abs		0.300 - 5.000	M22B127(
AB49900	MICROCYSTINS ADDA 54	1.202 Abs [1.2745] {8.0 C	0.072 µg/L [0.042]			0.300 - 5.000	M22B127(
AB49901	MICROCYSTINS ADDA 54	1.086 Abs	0.129 µg/L	Low, 78.696 %Abs		0.300 - 5.000	M22B127(
AB49901	MICROCYSTINS ADDA 54	1.048 Abs [1.0670] {2.5 C	0.150 µg/L [0.139]			0.300 - 5.000	M22B127(
AB49902	MICROCYSTINS ADDA 54	0.982 Abs	0.192 µg/L	Low, 71.159 %Abs		0.300 - 5.000	M22B127(
AB49902	MICROCYSTINS ADDA 54	0.966 Abs [0.9740] {1.2 C	0.203 µg/L [0.197]			0.300 - 5.000	M22B127(
AB49902MS	MICROCYSTINS ADDA 54	0.670 Abs	0.543 µg/L	48.551 %Abs		0.300 - 5.000	M22B127(
AB49902MS	MICROCYSTINS ADDA 54	0.648 Abs [0.6590] {2.4 C	0.587 µg/L [0.565]	46.957 %Abs [47.7		0.300 - 5.000	M22B127(
AB49902MSD	MICROCYSTINS ADDA 54	0.566 Abs	0.798 µg/L	41.014 %Abs		0.300 - 5.000	M22B127(
AB49902MSD	MICROCYSTINS ADDA 54	0.564 Abs [0.5650] {0.3 C	0.805 µg/L [0.801]	40.870 %Abs [40.9		0.300 - 5.000	M22B127(
AB49903	MICROCYSTINS ADDA 54	1.238 Abs	0.056 µg/L	Low, 89.710 %Abs		0.300 - 5.000	M22B127(
AB49903	MICROCYSTINS ADDA 54	1.269 Abs [1.2535] {1.7 C	0.044 µg/L [0.050]			0.300 - 5.000	M22B127(
AB49904	MICROCYSTINS ADDA 54	1.276 Abs	0.041 µg/L	Low, 92.464 %Abs		0.300 - 5.000	M22B127(
AB49904	MICROCYSTINS ADDA 54	1.235 Abs [1.2555] {2.3 C	0.058 µg/L [0.049]			0.300 - 5.000	M22B127(
AB49896	MICROCYSTINS ADDA 54	1.426 Abs	0.000 µg/L	Low, 103.333 %Abs		0.300 - 5.000	M22B127(
AB49896	MICROCYSTINS ADDA 54	1.370 Abs [1.3980] {2.8 C	0.004 µg/L [0.002]			0.300 - 5.000	M22B127(
AB49905	MICROCYSTINS ADDA 54	1.340 Abs	0.016 µg/L	Low, 97.101 %Abs		0.300 - 5.000	M22B127(
AB49905	MICROCYSTINS ADDA 54	1.354 Abs [1.3470] {0.7 C	0.011 µg/L [0.014]			0.300 - 5.000	M22B127(
AB49906	MICROCYSTINS ADDA 54	1.261 Abs	0.047 µg/L	Low, 91.377 %Abs		0.300 - 5.000	M22B127(
AB49906	MICROCYSTINS ADDA 54	1.270 Abs [1.2655] {0.5 C	0.043 µg/L [0.045]			0.300 - 5.000	M22B127(
AB51245	MICROCYSTINS ADDA 54	1.325 Abs	0.022 µg/L	Low, 96.014 %Abs		0.300 - 5.000	M22B127(
AB51245	MICROCYSTINS ADDA 54	1.247 Abs [1.2860] {4.3 C	0.053 µg/L [0.038]			0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.444 Abs	0.000 µg/L	Low, 104.638 %Abs		0.300 - 5.000	M22B127(
LRB 2	MICROCYSTINS ADDA 54	1.431 Abs [1.4375] {0.6 C	0.000 µg/L [0.000]			0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.786 Abs	0.369 µg/L	56.957 %Abs		0.300 - 5.000	M22B127(
LFB 2	MICROCYSTINS ADDA 54	0.756 Abs [0.7710] {2.8 C	0.407 µg/L [0.388]	54.783 %Abs [55.8		0.300 - 5.000	M22B127(

## Note

Signature

*David Jordan*

David Jordan 5/18/2022

## 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: M22B1270

## Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
5/18/2022 4:41:16 PM					
MCT Std 0	1.355 Abs	0.010 µg/L	R^2=0.99345, 98.188 %Abs	RK1:23->A01@2	
MCT Std 0	1.405 Abs [1.3800] {2.6 CV}	0.000 µg/L [0.005] {141.4 CV}	R^2=0.99345, 101.812 %Abs	RK1:23->B01@2	
MCT Std 1	1.035 Abs	0.158 µg/L	R^2=0.99345, 75.000 %Abs	RK1:24->C01@2	
MCT Std 1	1.049 Abs [1.0420] {1.0 CV}	0.150 µg/L [0.154] {3.7 CV}	R^2=0.99345, 76.014 %Abs	RK1:24->D01@2	
MCT Std 2	0.785 Abs	0.370 µg/L	R^2=0.99345, 56.884 %Abs	RK1:25->E01@2	
MCT Std 2	0.781 Abs [0.7830] {0.4 CV}	0.375 µg/L [0.373] {0.9 CV}	R^2=0.99345, 56.594 %Abs	RK1:25->F01@3	
MCT Std 3	0.500 Abs	1.061 µg/L	R^2=0.99345, 36.232 %Abs	RK1:26->G01@3	
MCT Std 3	0.428 Abs [0.4640] {11.0 CV}	1.552 µg/L [1.306] {26.6 CV}	R^2=0.99345, 31.014 %Abs	RK1:26->H01@3	
MCT Std 4	0.458 Abs	1.309 µg/L	R^2=0.99345, 33.188 %Abs	RK1:27->A02@2	
MCT Std 4	0.422 Abs [0.4400] {5.8 CV}	1.610 µg/L [1.460] {14.6 CV}	R^2=0.99345, 30.580 %Abs	RK1:27->B02@2	
MCT Std 5	0.296 Abs	> 5.000 µg/L	21.449 %Abs	RK1:28->C02@2	
MCT Std 5	0.278 Abs [0.2870] {4.4 CV}	> 5.000 µg/L	20.145 %Abs	RK1:28->D02@2	
*****					
5/18/2022 4:41:16 PM					
MCT 546 LRB 1	1.354 Abs	0.011 µg/L	98.116 %Abs	RK1:29->E02@2	
MCT 546 LRB 1	1.327 Abs [1.3405] {1.4 CV}	0.021 µg/L [0.016] {44.2 CV}	96.159 %Abs [97.138 %Abs]	RK1:29->F02@3	
MCT 546 Low-CV	0.832 Abs	0.318 µg/L	60.290 %Abs	RK1:30->G02@3	
MCT 546 Low-CV	0.771 Abs [0.8015] {5.4 CV}	0.387 µg/L [0.352] {13.8 CV}	55.870 %Abs [58.080 %Abs]	RK1:30->H02@3	
MCT 546 LFB 1	0.803 Abs	0.349 µg/L	58.188 %Abs	RK1:31->A03@2	
MCT 546 LFB 1	0.785 Abs [0.7940] {1.6 CV}	0.370 µg/L [0.359] {4.1 CV}	56.884 %Abs [57.536 %Abs]	RK1:31->B03@2	
*****					
Statistic					
MCT Std 0 [MEAN]	1.3800	0.0050			
MCT Std 0 [SD]	0.0354	0.0071			
MCT Std 0 [%CV]	2.5620	141.4214			
MCT Std 1 [MEAN]	1.0420	0.1540			
MCT Std 1 [SD]	0.0099	0.0057			
MCT Std 1 [%CV]	0.9501	3.6733			
MCT Std 1 [%DIFF]		2.6667			
MCT Std 2 [MEAN]	0.7830	0.3725			
MCT Std 2 [SD]	0.0028	0.0035			
MCT Std 2 [%CV]	0.3612	0.9491			
MCT Std 2 [%DIFF]		-6.8750			
MCT Std 3 [MEAN]	0.4640	1.3065			
MCT Std 3 [SD]	0.0509	0.3472			
MCT Std 3 [%CV]	10.9723	26.5740			
MCT Std 3 [%DIFF]		30.6500			
MCT Std 4 [MEAN]	0.4400	1.4595			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0255	0.2128		
MCT Std 4 [%CV]	5.7854	14.5830		
MCT Std 4 [%DIFF]		-27.0250		
MCT Std 5 [MEAN]	0.2870			
MCT Std 5 [SD]	0.0127			
MCT Std 5 [%CV]	4.4348			
MCT 546 LRB 1 [MEAN]	1.3405	0.0160		
MCT 546 LRB 1 [SD]	0.0191	0.0071		
MCT 546 LRB 1 [%CV]	1.4242	44.1942		
MCT 546 Low-CV [MEAN]	0.8015	0.3525		
MCT 546 Low-CV [SD]	0.0431	0.0488		
MCT 546 Low-CV [%CV]	5.3816	13.8412		
MCT 546 LFB 1 [MEAN]	0.7940	0.3595		
MCT 546 LFB 1 [SD]	0.0127	0.0148		
MCT 546 LFB 1 [%CV]	1.6030	4.1305		

## Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$   
 Weight: NONE  
 A = 1.3794  
 B = 1.0882  
 C = 0.33779  
 D = 0.24698  
 R2 coef = 0.99345  
 50% = 0.507

