



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)	% Recovery
MCT 546 LRB 1	Lab Reagent Blank	7/10/2019	7/10/2019	<0.30	
MCT 546 LFB 1	Lab Fortified Blank (True value = 0.600)	7/10/2019	7/10/2019	0.54	91
AB39825	Hardy Lake SRA	7/8/2019	7/10/2019	<0.30	
AB39825LD	Hardy Lake SRA Lab Dup.	7/8/2019	7/10/2019	<0.30	
AB39824	Deam Lake SRA	7/8/2019	7/10/2019	<0.30	
AB39821	Deam Lake SRA Field Dup.	7/8/2019	7/10/2019	<0.30	
AB39822	Field Blank	7/8/2019	7/10/2019	<0.30	
AB39823	Starve Hollow SRA	7/8/2019	7/10/2019	<0.30	
AB39829	Raccoon Lake SRA	7/8/2019	7/10/2019	<0.30	
AB39826	Raccoon Lake SRA Field Dup.	7/8/2019	7/10/2019	<0.30	
AB39827	Field Blank	7/8/2019	7/10/2019	<0.30	
AB39831	Whitewater Memorial S P	7/8/2019	7/10/2019	<0.30	
AB39828	Quakertown SRA	7/8/2019	7/10/2019	<0.30	
AB39830	Mounds SRA	7/8/2019	7/10/2019	<0.30	
MCT 546 LFB 2	Lab Fortified Blank (True value = 0.600)	7/10/2019	7/10/2019	0.49	81.3
MCT 546 LRB 2	Lab Reagent Blank	7/10/2019	7/10/2019	<0.30	

Test Information

Request: 7/10/2019 4:16:38 PM
Date: 7/9/2019 - 7/10/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
MCT Std 0	MICROCYSTINS ADDA 546	1.578 Abs	0.023 µg/L	R^2=0.99878	0.000
MCT Std 0	MICROCYSTINS ADDA 546	1.636 Abs [1.6070] {2.6 CV}	0.000 µg/L [0.012] {141.0}	R^2=0.99878	0.000
MCT Std 1	MICROCYSTINS ADDA 546	1.414 Abs	0.124 µg/L	R^2=0.99878	0.150
MCT Std 1	MICROCYSTINS ADDA 546	1.383 Abs [1.3985] {1.6 CV}	0.145 µg/L [0.134] {11.0}	R^2=0.99878	0.150
MCT Std 2	MICROCYSTINS ADDA 546	1.075 Abs	0.416 µg/L	R^2=0.99878	0.400
MCT Std 2	MICROCYSTINS ADDA 546	1.048 Abs [1.0615] {1.8 CV}	0.448 µg/L [0.432] {5.2}	R^2=0.99878	0.400
MCT Std 3	MICROCYSTINS ADDA 546	0.732 Abs	1.042 µg/L	R^2=0.99878	1.000
MCT Std 3	MICROCYSTINS ADDA 546	0.782 Abs [0.7570] {4.7 CV}	0.907 µg/L [0.975] {9.8}	R^2=0.99878	1.000
MCT Std 4	MICROCYSTINS ADDA 546	0.532 Abs	1.987 µg/L	R^2=0.99878	2.000
MCT Std 4	MICROCYSTINS ADDA 546	0.545 Abs [0.5385] {1.7 CV}	1.892 µg/L [1.939] {3.5}	R^2=0.99878	2.000
MCT Std 5	MICROCYSTINS ADDA 546	0.345 Abs	> 5.000 µg/L		5.000
MCT Std 5	MICROCYSTINS ADDA 546	0.352 Abs [0.3485] {1.4 CV}	> 5.000 µg/L		5.000
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.554 Abs	0.037 µg/L		
MCT 546 LRB 1	MICROCYSTINS ADDA 546	1.548 Abs [1.5510] {0.3 CV}	0.041 µg/L [0.039] {7.3}		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	1.189 Abs	0.299 µg/L		
MCT 546 Low-CV	MICROCYSTINS ADDA 546	1.122 Abs [1.1555] {4.1 CV}	0.365 µg/L [0.332] {14.1}		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	1.007 Abs	0.500 µg/L		
MCT 546 LFB 1	MICROCYSTINS ADDA 546	0.945 Abs [0.9760] {4.5 CV}	0.589 µg/L [0.544] {11.6}		
AB39821	MICROCYSTINS ADDA 546	1.495 Abs	0.073 µg/L	LOW	0.300 - 5
AB39821	MICROCYSTINS ADDA 546	1.526 Abs [1.5105] {1.5 CV}	0.054 µg/L [0.064] {21.2}	LOW [LOW]	0.300 - 5
AB39822	MICROCYSTINS ADDA 546	1.573 Abs	0.026 µg/L	LOW	0.300 - 5
AB39822	MICROCYSTINS ADDA 546	1.537 Abs [1.5550] {1.6 CV}	0.048 µg/L [0.037] {42.0}	LOW [LOW]	0.300 - 5
AB39823	MICROCYSTINS ADDA 546	1.534 Abs	0.049 µg/L	LOW	0.300 - 5
AB39823	MICROCYSTINS ADDA 546	1.508 Abs [1.5210] {1.2 CV}	0.065 µg/L [0.057] {19.8}	LOW [LOW]	0.300 - 5
AB39824	MICROCYSTINS ADDA 546	1.484 Abs	0.080 µg/L	LOW	0.300 - 5
AB39824	MICROCYSTINS ADDA 546	1.531 Abs [1.5075] {2.2 CV}	0.051 µg/L [0.065] {31.3}	LOW [LOW]	0.300 - 5
AB39825	MICROCYSTINS ADDA 546	1.271 Abs	0.228 µg/L	LOW	0.300 - 5
AB39825	MICROCYSTINS ADDA 546	1.377 Abs [1.3240] {5.7 CV}	0.149 µg/L [0.189] {29.6}	LOW [LOW]	0.300 - 5
AB39825LD	MICROCYSTINS ADDA 546	1.365 Abs	0.158 µg/L	LOW	0.300 - 5
AB39825LD	MICROCYSTINS ADDA 546	1.343 Abs [1.3540] {1.1 CV}	0.174 µg/L [0.166] {6.8}	LOW [LOW]	0.300 - 5
AB39826	MICROCYSTINS ADDA 546	1.433 Abs	0.112 µg/L	LOW	0.300 - 5
AB39826	MICROCYSTINS ADDA 546	1.363 Abs [1.3980] {3.5 CV}	0.159 µg/L [0.135] {24.5}	LOW [LOW]	0.300 - 5
AB39827	MICROCYSTINS ADDA 546	1.592 Abs	0.014 µg/L	LOW	0.300 - 5
AB39827	MICROCYSTINS ADDA 546	1.369 Abs [1.4805] {10.7 CV}	0.155 µg/L [0.084] {118.0}	LOW [LOW]	0.300 - 5
AB39828	MICROCYSTINS ADDA 546	1.491 Abs	0.075 µg/L	LOW	0.300 - 5
AB39828	MICROCYSTINS ADDA 546	1.454 Abs [1.4725] {1.8 CV}	0.099 µg/L [0.087] {19.5}	LOW [LOW]	0.300 - 5
AB39829	MICROCYSTINS ADDA 546	1.418 Abs	0.122 µg/L	LOW	0.300 - 5
AB39829	MICROCYSTINS ADDA 546	1.446 Abs [1.4320] {1.4 CV}	0.104 µg/L [0.113] {11.3}	LOW [LOW]	0.300 - 5
AB39830	MICROCYSTINS ADDA 546	1.390 Abs	0.141 µg/L	LOW	0.300 - 5
AB39830	MICROCYSTINS ADDA 546	1.429 Abs [1.4095] {2.0 CV}	0.115 µg/L [0.128] {14.4}	LOW [LOW]	0.300 - 5
AB39831	MICROCYSTINS ADDA 546	1.347 Abs	0.171 µg/L	LOW	0.300 - 5
AB39831	MICROCYSTINS ADDA 546	1.321 Abs [1.3340] {1.4 CV}	0.190 µg/L [0.181] {7.4}	LOW [LOW]	0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	1.049 Abs	0.447 µg/L		0.300 - 5
MCT 546 LFB 2	MICROCYSTINS ADDA 546	0.986 Abs [1.0175] {4.4 CV}	0.528 µg/L [0.488] {11.7}		0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.597 Abs	0.011 µg/L	LOW	0.300 - 5
MCT LRB 2	MICROCYSTINS ADDA 546	1.540 Abs [1.5685] {2.6 CV}	0.046 µg/L [0.029] {86.8}	LOW [LOW]	0.300 - 5
High CV	MICROCYSTINS ADDA 546	0.873 Abs	0.711 µg/L		0.300 - 5
High CV	MICROCYSTINS ADDA 546	0.934 Abs [0.9035] {4.8 CV}	0.606 µg/L [0.659] {11.3}		0.300 - 5



Test Report (by Request)

Note

Signature David Jordan
Date: 7/10/2019



MICROCYSTINS ADDA 546 - Assay Calibration Report

Assay Information

Assay Name: MICROCYSTINS ADDA 546

Version: 1

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: 7 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: 5/9/2019 11:43:40 AM

Normal: 0.300 - 5.000

of decimals: 3

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
7/10/2019 4:16:38 PM					
MCT Std 0	1.578 Abs	0.023 µg/L	R^2=0.99878	RK1:23->A01@2	
MCT Std 0	1.636 Abs [1.6070] {2.6 CV}	0.000 µg/L [0.012] {141.4 CV}	R^2=0.99878	RK1:23->B01@2	
MCT Std 1	1.414 Abs	0.124 µg/L	R^2=0.99878	RK1:24->C01@2	
MCT Std 1	1.383 Abs [1.3985] {1.6 CV}	0.145 µg/L [0.134] {11.0 CV}	R^2=0.99878	RK1:24->D01@2	
MCT Std 2	1.075 Abs	0.416 µg/L	R^2=0.99878	RK1:25->E01@2	
MCT Std 2	1.048 Abs [1.0615] {1.8 CV}	0.448 µg/L [0.432] {5.2 CV}	R^2=0.99878	RK1:25->F01@3	
MCT Std 3	0.732 Abs	1.042 µg/L	R^2=0.99878	RK1:26->G01@3	
MCT Std 3	0.782 Abs [0.7570] {4.7 CV}	0.907 µg/L [0.975] {9.8 CV}	R^2=0.99878	RK1:26->H01@3	
MCT Std 4	0.532 Abs	1.987 µg/L	R^2=0.99878	RK1:27->A02@2	
MCT Std 4	0.545 Abs [0.5385] {1.7 CV}	1.892 µg/L [1.939] {3.5 CV}	R^2=0.99878	RK1:27->B02@2	
MCT Std 5	0.345 Abs	> 5.000 µg/L		RK1:28->C02@2	
MCT Std 5	0.352 Abs [0.3485] {1.4 CV}	> 5.000 µg/L		RK1:28->D02@2	

7/10/2019 4:16:38 PM					
MCT 546 LRB 1	1.554 Abs	0.037 µg/L		RK1:29->E02@2	
MCT 546 LRB 1	1.548 Abs [1.5510] {0.3 CV}	0.041 µg/L [0.039] {7.3 CV}		RK1:29->F02@3	
MCT 546 Low-CV	1.189 Abs	0.299 µg/L		RK1:30->G02@3	
MCT 546 Low-CV	1.122 Abs [1.1555] {4.1 CV}	0.365 µg/L [0.332] {14.1 CV}		RK1:30->H02@3	
MCT 546 LFB 1	1.007 Abs	0.500 µg/L		RK1:31->A03@2	
MCT 546 LFB 1	0.945 Abs [0.9760] {4.5 CV}	0.589 µg/L [0.544] {11.6 CV}		RK1:31->B03@2	

Statistic					
MCT Std 0 [MEAN]	1.6070	0.0115			
MCT Std 0 [SD]	0.0410	0.0163			
MCT Std 0 [%CV]	2.5521	141.4214			
MCT Std 1 [MEAN]	1.3985	0.1345			
MCT Std 1 [SD]	0.0219	0.0148			
MCT Std 1 [%CV]	1.5674	11.0403			
MCT Std 1 [%DIFF]		-10.3333			
MCT Std 2 [MEAN]	1.0615	0.4320			
MCT Std 2 [SD]	0.0191	0.0226			
MCT Std 2 [%CV]	1.7986	5.2378			
MCT Std 2 [%DIFF]		8.0000			
MCT Std 3 [MEAN]	0.7570	0.9745			
MCT Std 3 [SD]	0.0354	0.0955			
MCT Std 3 [%CV]	4.6705	9.7957			
MCT Std 3 [%DIFF]		-2.5500			
MCT Std 4 [MEAN]	0.5385	1.9395			

Name	Absorbance	Concentration	Interpretation	Position
MCT Std 4 [SD]	0.0092	0.0672		
MCT Std 4 [%CV]	1.7070	3.4635		
MCT Std 4 [%DIFF]		-3.0250		
MCT Std 5 [MEAN]	0.3485			
MCT Std 5 [SD]	0.0049			
MCT Std 5 [%CV]	1.4203			
MCT 546 LRB 1 [MEAN]	1.5510	0.0390		
MCT 546 LRB 1 [SD]	0.0042	0.0028		
MCT 546 LRB 1 [%CV]	0.2735	7.2524		
MCT 546 Low-CV [MEAN]	1.1555	0.3320		
MCT 546 Low-CV [SD]	0.0474	0.0467		
MCT 546 Low-CV [%CV]	4.1001	14.0569		
MCT 546 LFB 1 [MEAN]	0.9760	0.5445		
MCT 546 LFB 1 [SD]	0.0438	0.0629		
MCT 546 LFB 1 [%CV]	4.4919	11.5578		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
Weight: NONE
A = 1.6135
B = 1.1058
C = 0.62443
D = 0.23048
R2 coef = 0.99871

