



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB51886	Mississinewa Lake Miami SRA	7/5/2022	7/7/2022	< 0.40
AB51887	Potato Creek State Park	7/5/2022	7/7/2022	< 0.40
AB51888	Lost Bridge West SRA	7/5/2022	7/7/2022	< 0.40
AB51884	Potato Creek State Park (Field Dup)	7/5/2022	7/7/2022	< 0.40
AB51885	Field Blank	7/5/2022	7/7/2022	< 0.40

Test Report (by Request)

Test Information

Request: 7/7/2022 9:59:54 AM
Date: 7/7/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.346 Abs	0.000 µg/L	R^2=0.99912, 100.2			M21L0919
ATX Std 0	ANATOXIN	1.337 Abs [1.3415] {0.5 C	0.006 µg/L [0.003]	R^2=0.99912, 99.62			M21L0919
ATX Std 1	ANATOXIN	1.153 Abs	0.138 µg/L	R^2=0.99912, 85.91			M21L0919
ATX Std 1	ANATOXIN	1.124 Abs [1.1385] {1.8 C	0.160 µg/L [0.149]	R^2=0.99912, 83.75			M21L0919
ATX Std 2	ANATOXIN	0.882 Abs	0.389 µg/L	R^2=0.99912, 65.72			M21L0919
ATX Std 2	ANATOXIN	0.873 Abs [0.8775] {0.7 C	0.399 µg/L [0.394]	R^2=0.99912, 65.05			M21L0919
ATX Std 3	ANATOXIN	0.563 Abs	0.962 µg/L	R^2=0.99912, 41.95			M21L0919
ATX Std 3	ANATOXIN	0.505 Abs [0.5340] {7.7 C	1.146 µg/L [1.054]	R^2=0.99912, 37.63			M21L0919
ATX Std 4	ANATOXIN	0.323 Abs	2.203 µg/L	R^2=0.99912, 24.06			M21L0919
ATX Std 4	ANATOXIN	0.313 Abs [0.3180] {2.2 C	2.302 µg/L [2.253]	R^2=0.99912, 23.32			M21L0919
ATX Std 5	ANATOXIN	0.175 Abs	> 5.000 µg/L	13.040 %Abs			M21L0919
ATX Std 5	ANATOXIN	0.169 Abs [0.1720] {2.5 C	> 5.000 µg/L	12.593 %Abs			M21L0919
ATX Control	ANATOXIN	0.684 Abs	0.683 µg/L	50.969 %Abs			M21L0919
ATX Control	ANATOXIN	0.674 Abs [0.6790] {1.0 C	0.702 µg/L [0.692]	50.224 %Abs [50.5			M21L0919

Note

Signature

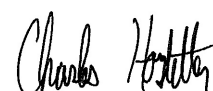
Charles Hostetter

Test Information

Request: 7/7/2022 10:00:24 AM
Date: 7/7/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.243 Abs	0.073 µg/L	Low, 92.623 %Abs		0.150 - 5.000	M21L0919
LRB	ANATOXIN	1.221 Abs [1.2320] {1.3 C	0.088 µg/L [0.080]	Low, 90.984 %Abs		0.150 - 5.000	M21L0919
LFB	ANATOXIN	0.679 Abs	0.692 µg/L	50.596 %Abs		0.150 - 5.000	M21L0919
LFB	ANATOXIN	0.660 Abs [0.6695] {2.0 C	0.730 µg/L [0.711]	49.180 %Abs [49.8		0.150 - 5.000	M21L0919
AB51886	ANATOXIN	1.238 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51886	ANATOXIN	1.240 Abs [1.2390] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51886MS	ANATOXIN	0.624 Abs	0.808 µg/L	46.498 %Abs		0.150 - 5.000	M21L0919
AB51886MS	ANATOXIN	0.611 Abs [0.6175] {1.5 C	0.838 µg/L [0.823]	45.529 %Abs [46.0		0.150 - 5.000	M21L0919
AB51886MSD	ANATOXIN	0.607 Abs	0.848 µg/L	45.231 %Abs		0.150 - 5.000	M21L0919
AB51886MSD	ANATOXIN	0.552 Abs [0.5795] {6.7 C	0.994 µg/L [0.921]	41.133 %Abs [43.1		0.150 - 5.000	M21L0919
AB51887	ANATOXIN	1.325 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51887	ANATOXIN	1.293 Abs [1.3090] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51888	ANATOXIN	1.245 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51888	ANATOXIN	1.249 Abs [1.2470] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51884	ANATOXIN	1.228 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51884	ANATOXIN	1.207 Abs [1.2175] {1.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51885	ANATOXIN	1.225 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51885	ANATOXIN	1.173 Abs [1.1990] {3.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919

Note



Signature

Assay Information

Assay Name: ANATOXIN
Version: 2
Temperature: Room Temperature
Last Modified By: Security disabled
Units: µg/L
Assay Description: PN 520060
Assay Substances: Controls:

Assay Mode: 4-Parameter Logistic Weight by:None
Well Type: Flat bottom
Last Modified On: 7/25/2019 3:49:23 PM
Normal: 0.150 - 5.000
of decimals: 3
Kit Lot Number: M21L0919

ATX Control
Standards:
ATX Std 0, Concentration = 0.000, Minimum number to use: 2
ATX Std 1, Concentration = 0.150, Minimum number to use: 2
ATX Std 2, Concentration = 0.400, Minimum number to use: 2
ATX Std 3, Concentration = 1.000, Minimum number to use: 2
ATX Std 4, Concentration = 2.500, Minimum number to use: 2
ATX 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 Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/7/2022 9:59:54 AM				
ATX Std 0	1.346 Abs	0.000 µg/L	R ² =0.99912, 100.298 %Abs	RK1:23->A01@2
ATX Std 0	1.337 Abs [1.3415] {0.5 CV}	0.006 µg/L [0.003] {141.4 CV}	R ² =0.99912, 99.627 %Abs	RK1:23->B01@2
ATX Std 1	1.153 Abs	0.138 µg/L	R ² =0.99912, 85.917 %Abs	RK1:24->C01@2
ATX Std 1	1.124 Abs [1.1385] {1.8 CV}	0.160 µg/L [0.149] {10.4 CV}	R ² =0.99912, 83.756 %Abs	RK1:24->D01@2
ATX Std 2	0.882 Abs	0.389 µg/L	R ² =0.99912, 65.723 %Abs	RK1:25->E01@2
ATX Std 2	0.873 Abs [0.8775] {0.7 CV}	0.399 µg/L [0.394] {1.8 CV}	R ² =0.99912, 65.052 %Abs	RK1:25->F01@3
ATX Std 3	0.563 Abs	0.962 µg/L	R ² =0.99912, 41.952 %Abs	RK1:26->G01@3
ATX Std 3	0.505 Abs [0.5340] {7.7 CV}	1.146 µg/L [1.054] {12.3 CV}	R ² =0.99912, 37.630 %Abs	RK1:26->H01@3
ATX Std 4	0.323 Abs	2.203 µg/L	R ² =0.99912, 24.069 %Abs	RK1:27->A02@2
ATX Std 4	0.313 Abs [0.3180] {2.2 CV}	2.302 µg/L [2.253] {3.1 CV}	R ² =0.99912, 23.323 %Abs	RK1:27->B02@2
ATX Std 5	0.175 Abs	> 5.000 µg/L	13.040 %Abs	RK1:28->C02@2
ATX Std 5	0.169 Abs [0.1720] {2.5 CV}	> 5.000 µg/L	12.593 %Abs	RK1:28->D02@2

7/7/2022 9:59:54 AM				
ATX Control	0.684 Abs	0.683 µg/L	50.969 %Abs	RK1:29->E02@2
ATX Control	0.674 Abs [0.6790] {1.0 CV}	0.702 µg/L [0.692] {1.9 CV}	50.224 %Abs [50.596 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.3415	0.0030		
ATX Std 0 [SD]	0.0064	0.0042		
ATX Std 0 [%CV]	0.4744	141.4214		
ATX Std 1 [MEAN]	1.1385	0.1490		
ATX Std 1 [SD]	0.0205	0.0156		
ATX Std 1 [%CV]	1.8012	10.4405		
ATX Std 1 [%DIFF]		-0.6667		
ATX Std 2 [MEAN]	0.8775	0.3940		
ATX Std 2 [SD]	0.0064	0.0071		
ATX Std 2 [%CV]	0.7252	1.7947		
ATX Std 2 [%DIFF]		-1.5000		
ATX Std 3 [MEAN]	0.5340	1.0540		
ATX Std 3 [SD]	0.0410	0.1301		
ATX Std 3 [%CV]	7.6802	12.3442		
ATX Std 3 [%DIFF]		5.4000		
ATX Std 4 [MEAN]	0.3180	2.2525		
ATX Std 4 [SD]	0.0071	0.0700		
ATX Std 4 [%CV]	2.2236	3.1078		
ATX Std 4 [%DIFF]		-9.9000		
ATX Std 5 [MEAN]	0.1720			
ATX Std 5 [SD]	0.0042			
ATX Std 5 [%CV]	2.4667			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.6790	0.6925			
ATX Control [SD]	0.0071	0.0134			
ATX Control [%CV]	1.0414	1.9401			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.3433
 B = 1.1310
 C = 0.64066
 D = 0.070550
 R2 coef = 0.99912
 50% = 0.708

