



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB51870	Raccoon Lake SRA	6/27/2022	6/29/2022	< 0.40
AB51871	Hardy Lake SRA	6/27/2022	6/29/2022	< 0.40
AB51872	Hardy Lake SRA (Field Duplicate)	6/27/2022	6/29/2022	< 0.40
AB51873	Field Blank	6/27/2022	6/29/2022	< 0.40

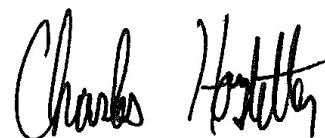
Test Report (by Request)

Test Information

Request: 6/29/2022 1:18:42 PM
Date: 6/29/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.532 Abs	0.000 µg/L	R ² =0.99911, 101.4			M21L0919
ATX Std 0	ANATOXIN	1.489 Abs [1.5105] {2.0 C	0.006 µg/L [0.003]	R ² =0.99911, 98.60			M21L0919
ATX Std 1	ANATOXIN	1.212 Abs	0.130 µg/L	R ² =0.99911, 80.26			M21L0919
ATX Std 1	ANATOXIN	1.165 Abs [1.1885] {2.8 C	0.160 µg/L [0.145]	R ² =0.99911, 77.15			M21L0919
ATX Std 2	ANATOXIN	0.908 Abs	0.386 µg/L	R ² =0.99911, 60.13			M21L0919
ATX Std 2	ANATOXIN	0.874 Abs [0.8910] {2.7 C	0.428 µg/L [0.407]	R ² =0.99911, 57.88			M21L0919
ATX Std 3	ANATOXIN	0.577 Abs	1.035 µg/L	R ² =0.99911, 38.21			M21L0919
ATX Std 3	ANATOXIN	0.575 Abs [0.5760] {0.2 C	1.042 µg/L [1.039]	R ² =0.99911, 38.07			M21L0919
ATX Std 4	ANATOXIN	0.373 Abs	2.111 µg/L	R ² =0.99911, 24.70			M21L0919
ATX Std 4	ANATOXIN	0.344 Abs [0.3585] {5.7 C	2.382 µg/L [2.247]	R ² =0.99911, 22.78			M21L0919
ATX Std 5	ANATOXIN	0.195 Abs	> 5.000 µg/L	12.914 %Abs			M21L0919
ATX Std 5	ANATOXIN	0.183 Abs [0.1890] {4.5 C	> 5.000 µg/L	12.119 %Abs			M21L0919
ATX Control	ANATOXIN	0.740 Abs	0.635 µg/L	49.007 %Abs			M21L0919
ATX Control	ANATOXIN	0.688 Abs [0.7140] {5.1 C	0.740 µg/L [0.688]	45.563 %Abs [47.2			M21L0919

Note



Signature

Test Report (by Request)

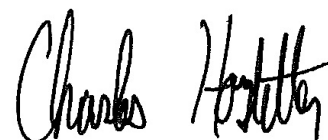
Test Information

Request: 6/29/2022 1:20:37 PM
Date: 6/29/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.294 Abs	0.086 µg/L	Low, 85.695 %Abs		0.150 - 5.000	M21L0919
LRB	ANATOXIN	1.271 Abs [1.2825] {1.3 C	0.097 µg/L [0.091]	Low, 84.172 %Abs		0.150 - 5.000	M21L0919
LFB	ANATOXIN	0.791 Abs	0.547 µg/L	52.384 %Abs		0.150 - 5.000	M21L0919
LFB	ANATOXIN	0.744 Abs [0.7675] {4.3 C	0.627 µg/L [0.587]	49.272 %Abs [50.8		0.150 - 5.000	M21L0919
AB51870	ANATOXIN	1.392 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51870	ANATOXIN	1.346 Abs [1.3690] {2.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51870MS	ANATOXIN	0.689 Abs	0.737 µg/L	45.629 %Abs		0.150 - 5.000	M21L0919
AB51870MS	ANATOXIN	0.634 Abs [0.6615] {5.9 C	0.869 µg/L [0.803]	41.987 %Abs [43.8		0.150 - 5.000	M21L0919
AB51870MSD	ANATOXIN	0.646 Abs	0.838 µg/L	42.781 %Abs		0.150 - 5.000	M21L0919
AB51870MSD	ANATOXIN	0.640 Abs [0.6430] {0.7 C	0.853 µg/L [0.845]	42.384 %Abs [42.5		0.150 - 5.000	M21L0919
AB51871	ANATOXIN	1.169 Abs	0.173 µg/L	77.417 %Abs	MDF=1.100	0.150 - 5.000	M21L0919
AB51871	ANATOXIN	1.142 Abs [1.1555] {1.7 C	0.192 µg/L [0.183]	75.629 %Abs [76.5	MDF=1.100	0.150 - 5.000	M21L0919
AB51872	ANATOXIN	1.111 Abs	0.217 µg/L	73.576 %Abs	MDF=1.100	0.150 - 5.000	M21L0919
AB51872	ANATOXIN	1.078 Abs [1.0945] {2.1 C	0.244 µg/L [0.230]	71.391 %Abs [72.4	MDF=1.100	0.150 - 5.000	M21L0919
AB51873	ANATOXIN	1.353 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB51873	ANATOXIN	1.296 Abs [1.3245] {3.0 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:
ATX Control
Standards:

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 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
6/29/2022 1:18:42 PM				
ATX Std 0	1.532 Abs	0.000 µg/L	R ² =0.99911, 101.457 %Abs	RK1:23->A01@2
ATX Std 0	1.489 Abs [1.5105] {2.0 CV}	0.006 µg/L [0.003] {141.4 CV}	R ² =0.99911, 98.609 %Abs	RK1:23->B01@2
ATX Std 1	1.212 Abs	0.130 µg/L	R ² =0.99911, 80.265 %Abs	RK1:24->C01@2
ATX Std 1	1.165 Abs [1.1885] {2.8 CV}	0.160 µg/L [0.145] {14.6 CV}	R ² =0.99911, 77.152 %Abs	RK1:24->D01@2
ATX Std 2	0.908 Abs	0.386 µg/L	R ² =0.99911, 60.132 %Abs	RK1:25->E01@2
ATX Std 2	0.874 Abs [0.8910] {2.7 CV}	0.428 µg/L [0.407] {7.3 CV}	R ² =0.99911, 57.881 %Abs	RK1:25->F01@3
ATX Std 3	0.577 Abs	1.035 µg/L	R ² =0.99911, 38.212 %Abs	RK1:26->G01@3
ATX Std 3	0.575 Abs [0.5760] {0.2 CV}	1.042 µg/L [1.039] {0.5 CV}	R ² =0.99911, 38.079 %Abs	RK1:26->H01@3
ATX Std 4	0.373 Abs	2.111 µg/L	R ² =0.99911, 24.702 %Abs	RK1:27->A02@2
ATX Std 4	0.344 Abs [0.3585] {5.7 CV}	2.382 µg/L [2.247] {8.5 CV}	R ² =0.99911, 22.781 %Abs	RK1:27->B02@2
ATX Std 5	0.195 Abs	> 5.000 µg/L	12.914 %Abs	RK1:28->C02@2
ATX Std 5	0.183 Abs [0.1890] {4.5 CV}	> 5.000 µg/L	12.119 %Abs	RK1:28->D02@2

6/29/2022 1:18:42 PM				
ATX Control	0.740 Abs	0.635 µg/L	49.007 %Abs	RK1:29->E02@2
ATX Control	0.688 Abs [0.7140] {5.1 CV}	0.740 µg/L [0.688] {10.8 CV}	45.563 %Abs [47.285 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.5105	0.0030		
ATX Std 0 [SD]	0.0304	0.0042		
ATX Std 0 [%CV]	2.0129	141.4214		
ATX Std 1 [MEAN]	1.1885	0.1450		
ATX Std 1 [SD]	0.0332	0.0212		
ATX Std 1 [%CV]	2.7963	14.6298		
ATX Std 1 [%DIFF]		-3.3333		
ATX Std 2 [MEAN]	0.8910	0.4070		
ATX Std 2 [SD]	0.0240	0.0297		
ATX Std 2 [%CV]	2.6983	7.2969		
ATX Std 2 [%DIFF]		1.7500		
ATX Std 3 [MEAN]	0.5760	1.0385		
ATX Std 3 [SD]	0.0014	0.0049		
ATX Std 3 [%CV]	0.2455	0.4766		
ATX Std 3 [%DIFF]		3.8500		
ATX Std 4 [MEAN]	0.3585	2.2465		
ATX Std 4 [SD]	0.0205	0.1916		
ATX Std 4 [%CV]	5.7200	8.5300		
ATX Std 4 [%DIFF]		-10.1400		
ATX Std 5 [MEAN]	0.1890			
ATX Std 5 [SD]	0.0085			
ATX Std 5 [%CV]	4.4896			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.7140	0.6875			
ATX Control [SD]	0.0368	0.0742			
ATX Control [%CV]	5.1498	10.7995			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5122
 B = 0.91480
 C = 0.58936
 D = 0.018431
 R2 coef = 0.99911
 50% = 0.607

