



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52159	Raccoon Lake SRA	7/25/2022	7/28/2022	< 0.40
AB52161	Cagles Mill Lake Beach	7/25/2022	7/28/2022	< 0.40
AB52162	Paynetown SRA	7/25/2022	7/28/2022	< 0.40
AB52163	Fairfax SRA	7/25/2022	7/28/2022	< 0.40
AB52165	Whitewater Memorial SP	7/26/2022	7/28/2022	< 0.40
AB52166	Quakertown SRA	7/26/2022	7/28/2022	< 0.40
AB52167	Mounds SRA	7/26/2022	7/28/2022	< 0.40
AB52168	Hardy Lake SRA	7/26/2022	7/28/2022	0.43
AB52169	Whitewater Memorial SP (Field Duplicate)	7/26/2022	7/28/2022	< 0.40
AB52170	Field Blank	7/26/2022	7/28/2022	< 0.40
AB52174	Ft. Ben Harrison SP Dog Lake	7/26/2022	7/28/2022	< 0.40

Test Report (by Request)

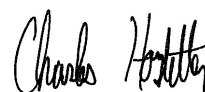
Test Information

Request: 7/28/2022 12:47:51 PM
Date: 7/28/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.369 Abs	0.001 µg/L	R ² =0.99932, 100.0			M21L0919
ATX Std 0	ANATOXIN	1.369 Abs [1.3690] {0.0 C	0.001 µg/L [0.001]	R ² =0.99932, 100.0			M21L0919
ATX Std 1	ANATOXIN	1.144 Abs	0.136 µg/L	R ² =0.99932, 83.56			M21L0919
ATX Std 1	ANATOXIN	1.111 Abs [1.1275] {2.1 C	0.160 µg/L [0.148]	R ² =0.99932, 81.15			M21L0919
ATX Std 2	ANATOXIN	0.877 Abs	0.380 µg/L	R ² =0.99932, 64.06			M21L0919
ATX Std 2	ANATOXIN	0.848 Abs [0.8625] {2.4 C	0.416 µg/L [0.398]	R ² =0.99932, 61.94			M21L0919
ATX Std 3	ANATOXIN	0.549 Abs	1.018 µg/L	R ² =0.99932, 40.10			M21L0919
ATX Std 3	ANATOXIN	0.535 Abs [0.5420] {1.8 C	1.064 µg/L [1.041]	R ² =0.99932, 39.08			M21L0919
ATX Std 4	ANATOXIN	0.339 Abs	2.150 µg/L	R ² =0.99932, 24.76			M21L0919
ATX Std 4	ANATOXIN	0.313 Abs [0.3260] {5.6 C	2.411 µg/L [2.280]	R ² =0.99932, 22.86			M21L0919
ATX Std 5	ANATOXIN	0.179 Abs	> 5.000 µg/L	13.075 %Abs			M21L0919
ATX Std 5	ANATOXIN	0.173 Abs [0.1760] {2.4 C	> 5.000 µg/L	12.637 %Abs			M21L0919
ATX Control	ANATOXIN	0.700 Abs	0.647 µg/L	51.132 %Abs			M21L0919
ATX Control	ANATOXIN	0.664 Abs [0.6820] {3.7 C	0.720 µg/L [0.684]	48.503 %Abs [49.8			M21L0919

Note

Signature



Test Report (by Request)

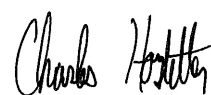
Test Information

Request: 7/28/2022 1:33:09 PM
Date: 7/28/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.237 Abs	0.075 µg/L	Low, 90.358 %Abs		0.150 - 5.000	M21L0919
LRB	ANATOXIN	1.205 Abs [1.2210] {1.9 C	0.095 µg/L [0.085]	Low, 88.020 %Abs		0.150 - 5.000	M21L0919
LFB (ANA)	ANATOXIN	0.746 Abs	0.565 µg/L	54.492 %Abs		0.150 - 5.000	M21L0919
LFB (ANA)	ANATOXIN	0.698 Abs [0.7220] {4.7 C	0.651 µg/L [0.608]	50.986 %Abs [52.7		0.150 - 5.000	M21L0919
AB52159	ANATOXIN	1.294 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52159	ANATOXIN	1.248 Abs [1.2710] {2.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52159MS	ANATOXIN	0.667 Abs	0.713 µg/L	48.722 %Abs		0.150 - 5.000	M21L0919
AB52159MS	ANATOXIN	0.622 Abs [0.6445] {4.9 C	0.815 µg/L [0.764]	45.435 %Abs [47.0		0.150 - 5.000	M21L0919
AB52159MSD	ANATOXIN	0.618 Abs	0.825 µg/L	45.142 %Abs		0.150 - 5.000	M21L0919
AB52159MSD	ANATOXIN	0.618 Abs [0.6180] {0.0 C	0.825 µg/L [0.825]	45.142 %Abs [45.1		0.150 - 5.000	M21L0919
AB52161	ANATOXIN	1.331 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52161	ANATOXIN	1.281 Abs [1.3060] {2.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52162	ANATOXIN	1.243 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52162	ANATOXIN	1.225 Abs [1.2340] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52163	ANATOXIN	1.204 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52163	ANATOXIN	1.176 Abs [1.1900] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52165	ANATOXIN	1.146 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52165	ANATOXIN	1.136 Abs [1.1410] {0.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52166	ANATOXIN	1.376 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52166	ANATOXIN	1.349 Abs [1.3625] {1.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52167	ANATOXIN	1.319 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52167	ANATOXIN	1.304 Abs [1.3115] {0.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52168	ANATOXIN	0.882 Abs	0.411 µg/L	64.427 %Abs	MDF=1.100	0.150 - 5.000	M21L0919
AB52168	ANATOXIN	0.855 Abs [0.8685] {2.2 C	0.448 µg/L [0.430]	62.454 %Abs [63.4	MDF=1.100	0.150 - 5.000	M21L0919
AB52169	ANATOXIN	1.147 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52169	ANATOXIN	1.143 Abs [1.1450] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52170	ANATOXIN	1.396 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52170	ANATOXIN	1.326 Abs [1.3610] {3.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52174	ANATOXIN	1.291 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M21L0919
AB52174	ANATOXIN	1.181 Abs [1.2360] {6.3 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
7/28/2022 12:47:51 PM				
ATX Std 0	1.369 Abs	0.001 µg/L	R ² =0.99932, 100.000 %Abs	RK1:23->A01@2
ATX Std 0	1.369 Abs [1.3690] {0.0 CV}	0.001 µg/L [0.001] {0.0 CV}	R ² =0.99932, 100.000 %Abs	RK1:23->B01@2
ATX Std 1	1.144 Abs	0.136 µg/L	R ² =0.99932, 83.565 %Abs	RK1:24->C01@2
ATX Std 1	1.111 Abs [1.1275] {2.1 CV}	0.160 µg/L [0.148] {11.5 CV}	R ² =0.99932, 81.154 %Abs	RK1:24->D01@2
ATX Std 2	0.877 Abs	0.380 µg/L	R ² =0.99932, 64.061 %Abs	RK1:25->E01@2
ATX Std 2	0.848 Abs [0.8625] {2.4 CV}	0.416 µg/L [0.398] {6.4 CV}	R ² =0.99932, 61.943 %Abs	RK1:25->F01@3
ATX Std 3	0.549 Abs	1.018 µg/L	R ² =0.99932, 40.102 %Abs	RK1:26->G01@3
ATX Std 3	0.535 Abs [0.5420] {1.8 CV}	1.064 µg/L [1.041] {3.1 CV}	R ² =0.99932, 39.080 %Abs	RK1:26->H01@3
ATX Std 4	0.339 Abs	2.150 µg/L	R ² =0.99932, 24.763 %Abs	RK1:27->A02@2
ATX Std 4	0.313 Abs [0.3260] {5.6 CV}	2.411 µg/L [2.280] {8.1 CV}	R ² =0.99932, 22.863 %Abs	RK1:27->B02@2
ATX Std 5	0.179 Abs	> 5.000 µg/L	13.075 %Abs	RK1:28->C02@2
ATX Std 5	0.173 Abs [0.1760] {2.4 CV}	> 5.000 µg/L	12.637 %Abs	RK1:28->D02@2

7/28/2022 12:47:51 PM				
ATX Control	0.700 Abs	0.647 µg/L	51.132 %Abs	RK1:29->E02@2
ATX Control	0.664 Abs [0.6820] {3.7 CV}	0.720 µg/L [0.684] {7.6 CV}	48.503 %Abs [49.817 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.3690	0.0010		
ATX Std 0 [SD]	0.0000	0.0000		
ATX Std 0 [%CV]	0.0000	0.0000		
ATX Std 1 [MEAN]	1.1275	0.1480		
ATX Std 1 [SD]	0.0233	0.0170		
ATX Std 1 [%CV]	2.0696	11.4666		
ATX Std 1 [%DIFF]		-1.3333		
ATX Std 2 [MEAN]	0.8625	0.3980		
ATX Std 2 [SD]	0.0205	0.0255		
ATX Std 2 [%CV]	2.3775	6.3959		
ATX Std 2 [%DIFF]		-0.5000		
ATX Std 3 [MEAN]	0.5420	1.0410		
ATX Std 3 [SD]	0.0099	0.0325		
ATX Std 3 [%CV]	1.8265	3.1246		
ATX Std 3 [%DIFF]		4.1000		
ATX Std 4 [MEAN]	0.3260	2.2805		
ATX Std 4 [SD]	0.0184	0.1846		
ATX Std 4 [%CV]	5.6395	8.0927		
ATX Std 4 [%DIFF]		-8.7800		
ATX Std 5 [MEAN]	0.1760			
ATX Std 5 [SD]	0.0042			
ATX Std 5 [%CV]	2.4106			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.6820	0.6835			
ATX Control [SD]	0.0255	0.0516			
ATX Control [%CV]	3.7325	7.5521			

Assay Curve

$$y = (A-D)/(1+(x/C)^B) + D$$
 Weight: NONE
 A = 1.3706
 B = 1.0270
 C = 0.63182
 D = 0.045736
 R2 coef = 0.99932
 50% = 0.677

