



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45578	Cecil M. Harden Lake - Raccoon Lake SRA Beach	6/23/2025	6/26/2025	< 0.40
AC45579	Cagles Mill Lake - Lieber SRA Beach	6/23/2025	6/26/2025	< 0.40
AC45580	Whitewater Memorial SP - Whitewater Lake Beach	6/24/2025	6/26/2025	< 0.40
AC45581	Brookville Lake - Mounds SRA Beach	6/24/2025	6/26/2025	< 0.40
AC45582	Cagles Mill Lake - Lieber SRA Beach (Field Duplicate)	6/24/2025	6/26/2025	< 0.40
AC45583	Field Blank	6/24/2025	6/26/2025	< 0.40
AC45650	Potato Creek SP - Worster Lake Beach	6/23/2025	6/26/2025	< 0.40

Test Information

Request: 6/26/2025 3:22:08 PM
Date: 6/25/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.633 Abs	0.000 µg/L	R^2=0.99921, 101.1		0.000	Kit:P23L3i
ATX Std 0	ANATOXIN	1.596 Abs [1.6145] {1.6 C	0.006 µg/L [0.003]	R^2=0.99921, 98.82		0.000	Kit:P23L3i
ATX Std 1	ANATOXIN	1.330 Abs	0.142 µg/L	R^2=0.99921, 82.35		0.150	Kit:P23L3i
ATX Std 1	ANATOXIN	1.311 Abs [1.3205] {1.0 C	0.155 µg/L [0.149]	R^2=0.99921, 81.17		0.150	Kit:P23L3i
ATX Std 2	ANATOXIN	1.033 Abs	0.420 µg/L	R^2=0.99921, 63.96		0.400	Kit:P23L3i
ATX Std 2	ANATOXIN	1.074 Abs [1.0535] {2.8 C	0.371 µg/L [0.396]	R^2=0.99921, 66.50		0.400	Kit:P23L3i
ATX Std 3	ANATOXIN	0.714 Abs	1.028 µg/L	R^2=0.99921, 44.21		1.000	Kit:P23L3i
ATX Std 3	ANATOXIN	0.696 Abs [0.7050] {1.8 C	1.081 µg/L [1.055]	R^2=0.99921, 43.05		1.000	Kit:P23L3i
ATX Std 4	ANATOXIN	0.445 Abs	2.275 µg/L	R^2=0.99921, 27.55		2.500	Kit:P23L3i
ATX Std 4	ANATOXIN	0.436 Abs [0.4405] {1.4 C	2.344 µg/L [2.310]	R^2=0.99921, 26.95		2.500	Kit:P23L3i
ATX Std 5	ANATOXIN	0.236 Abs	> 5.000 µg/L	14.613 %Abs		5.000	Kit:P23L3i
ATX Std 5	ANATOXIN	0.226 Abs [0.2310] {3.1 C	> 5.000 µg/L	13.994 %Abs		5.000	Kit:P23L3i
ATX Control	ANATOXIN	0.862 Abs	0.685 µg/L	53.375 %Abs			Kit:P23L3i
ATX Control	ANATOXIN	0.840 Abs [0.8510] {1.8 C	0.728 µg/L [0.707]	52.012 %Abs [52.6			Kit:P23L3i

Note

Signature Charles Hostetter

Test Information

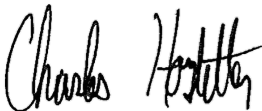
Request: 6/26/2025 3:44:10 PM

Date: 6/25/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#	
LRB	ANATOXIN	1.454 Abs	0.067 µg/L	Low, 90.031 %Abs		0.150 - 5.000	Kit:P23L3i	
LRB	ANATOXIN	1.461 Abs [1.4575] {0.3 C	0.064 µg/L [0.066]	Low, 90.464 %Abs		0.150 - 5.000	Kit:P23L3i	
LFB (ANA)	ANATOXIN	0.884 Abs	0.645 µg/L	54.737 %Abs		0.150 - 5.000	Kit:P23L3i	
LFB (ANA)	ANATOXIN	0.861 Abs [0.8725] {1.9 C	0.687 µg/L [0.666]	53.313 %Abs [54.0		0.150 - 5.000	Kit:P23L3i	
AC45578	ANATOXIN	1.458 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45578	ANATOXIN	1.462 Abs [1.4600] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45579	ANATOXIN	1.454 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45579	ANATOXIN	1.481 Abs [1.4675] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45580	ANATOXIN	1.447 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45580	ANATOXIN	1.440 Abs [1.4435] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45580MS	ANATOXIN	0.876 Abs	0.659 µg/L	54.241 %Abs		0.150 - 5.000	Kit:P23L3i	
AC45580MS	ANATOXIN	0.836 Abs [0.8560] {3.3 C	0.736 µg/L [0.698]	51.765 %Abs [53.0		0.150 - 5.000	Kit:P23L3i	
AC45580MSD	ANATOXIN	0.828 Abs	0.752 µg/L	51.269 %Abs		0.150 - 5.000	Kit:P23L3i	
AC45580MSD	ANATOXIN	0.798 Abs [0.8130] {2.6 C	0.817 µg/L [0.785]	49.412 %Abs [50.3		0.150 - 5.000	Kit:P23L3i	
AC45581	ANATOXIN	1.440 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45581	ANATOXIN	1.460 Abs [1.4500] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45650	ANATOXIN	1.405 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45650	ANATOXIN	1.400 Abs [1.4025] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45582	ANATOXIN	1.457 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45582	ANATOXIN	1.492 Abs [1.4745] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45583	ANATOXIN	1.478 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	
AC45583	ANATOXIN	1.485 Abs [1.4815] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i	

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: Kit:P23L3054

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: "

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Name	Absorbance	Concentration	Interpretation	Position
6/26/2025 3:22:08 PM				
ATX Std 0	1.633 Abs	0.000 µg/L	R^2=0.99921, 101.115 %Abs	RK1:23->A01@2
ATX Std 0	1.596 Abs [1.6145] {1.6 CV}	0.006 µg/L [0.003] {141.4 CV}	R^2=0.99921, 98.824 %Abs	RK1:23->B01@2
ATX Std 1	1.330 Abs	0.142 µg/L	R^2=0.99921, 82.353 %Abs	RK1:24->C01@2
ATX Std 1	1.311 Abs [1.3205] {1.0 CV}	0.155 µg/L [0.149] {6.2 CV}	R^2=0.99921, 81.176 %Abs	RK1:24->D01@2
ATX Std 2	1.033 Abs	0.420 µg/L	R^2=0.99921, 63.963 %Abs	RK1:25->E01@2
ATX Std 2	1.074 Abs [1.0535] {2.8 CV}	0.371 µg/L [0.396] {8.8 CV}	R^2=0.99921, 66.502 %Abs	RK1:25->F01@3
ATX Std 3	0.714 Abs	1.028 µg/L	R^2=0.99921, 44.211 %Abs	RK1:26->G01@3
ATX Std 3	0.696 Abs [0.7050] {1.8 CV}	1.081 µg/L [1.055] {3.6 CV}	R^2=0.99921, 43.096 %Abs	RK1:26->H01@3
ATX Std 4	0.445 Abs	2.275 µg/L	R^2=0.99921, 27.554 %Abs	RK1:27->A02@2
ATX Std 4	0.436 Abs [0.4405] {1.4 CV}	2.344 µg/L [2.310] {2.1 CV}	R^2=0.99921, 26.997 %Abs	RK1:27->B02@2
ATX Std 5	0.236 Abs	> 5.000 µg/L	14.613 %Abs	RK1:28->C02@2
ATX Std 5	0.226 Abs [0.2310] {3.1 CV}	> 5.000 µg/L	13.994 %Abs	RK1:28->D02@2

6/26/2025 3:22:08 PM				
ATX Control	0.862 Abs	0.685 µg/L	53.375 %Abs	RK1:29->E02@2
ATX Control	0.840 Abs [0.8510] {1.8 CV}	0.728 µg/L [0.707] {4.3 CV}	52.012 %Abs [52.693 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.6145	0.0030		
ATX Std 0 [SD]	0.0262	0.0042		
ATX Std 0 [%CV]	1.6205	141.4214		
ATX Std 1 [MEAN]	1.3205	0.1485		
ATX Std 1 [SD]	0.0134	0.0092		
ATX Std 1 [%CV]	1.0174	6.1902		
ATX Std 1 [%DIFF]		-1.0000		
ATX Std 2 [MEAN]	1.0535	0.3955		
ATX Std 2 [SD]	0.0290	0.0346		
ATX Std 2 [%CV]	2.7519	8.7606		
ATX Std 2 [%DIFF]		-1.1250		
ATX Std 3 [MEAN]	0.7050	1.0545		
ATX Std 3 [SD]	0.0127	0.0375		
ATX Std 3 [%CV]	1.8054	3.5540		
ATX Std 3 [%DIFF]		5.4500		
ATX Std 4 [MEAN]	0.4405	2.3095		
ATX Std 4 [SD]	0.0064	0.0488		
ATX Std 4 [%CV]	1.4447	2.1126		
ATX Std 4 [%DIFF]		-7.6200		
ATX Std 5 [MEAN]	0.2310			
ATX Std 5 [SD]	0.0071			
ATX Std 5 [%CV]	3.0611			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.8510	0.7065			
ATX Control [SD]	0.0156	0.0304			
ATX Control [%CV]	1.8280	4.3037			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.6166
B = 0.87829
C = 0.84610
D = -0.046400
R2 coef = 0.99921
50% = 0.796

